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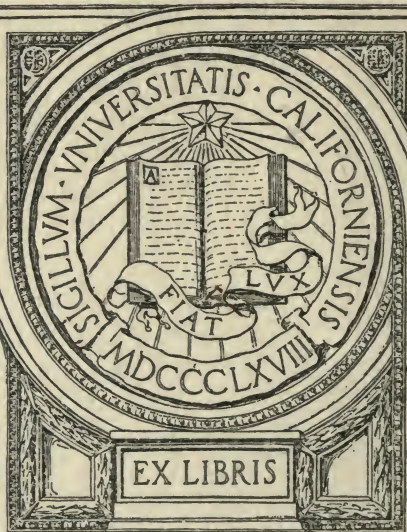
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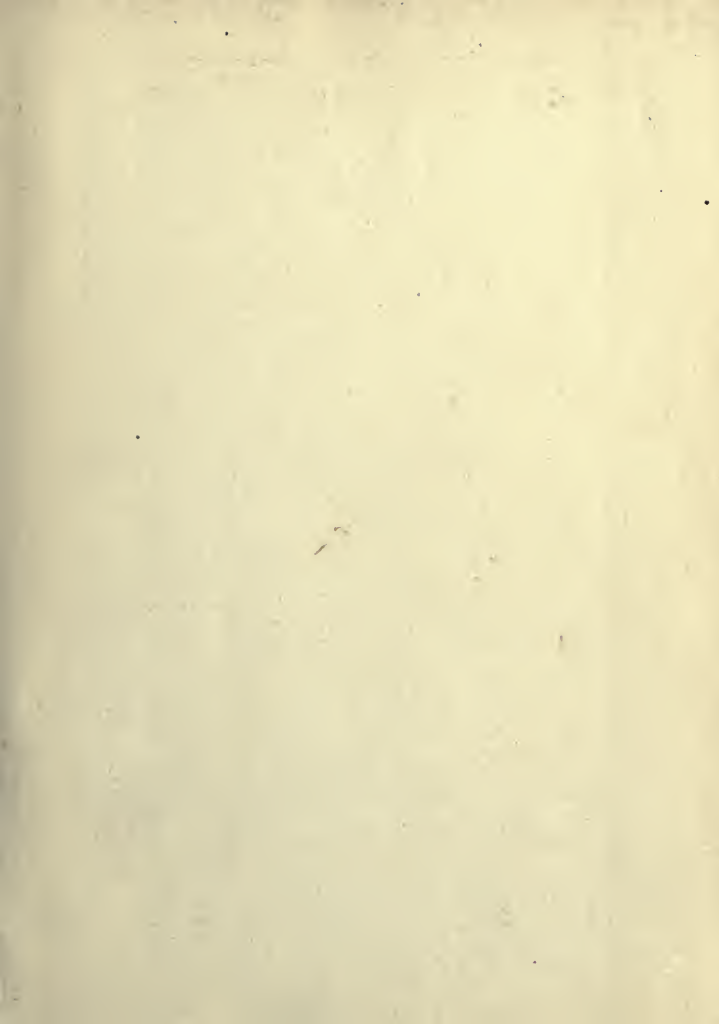
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CAVALRY
SERVICE REGULATIONS
UNITED STATES ARMY
1914

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WAR DEPARTMENT : OFFICE OF THE CHIEF OF STAFF

Cavalry Service Regulations

UNITED STATES ARMY

(EXPERIMENTAL)

U. S. General staff

1914



WASHINGTON
GOVERNMENT PRINTING OFFICE

1914

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1914

WAR DEPARTMENT,

Document No. 461.

Office of the Chief of Staff.

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF STAFF,
Washington, March 9, 1914.

The following (Experimental) Cavalry Service Regulations were prepared by a board composed of:

Brig. Gen. Edward J. McClernand, U. S. Army, retired.

Col. Cunliffe H. Murray, Twelfth Cavalry.

Lieut. Col. Joseph T. Dickman, Cavalry.

Lieut. Col. Frederick S. Foltz, General Staff.

Maj. Jesse McI. Carter, Cavalry.

Capt. Frank Parker, Eleventh Cavalry.

They are approved and published for experimentation by the Cavalry of the Army of the United States.

They will govern in the training and leading of Cavalry, but everything not foreseen therein is left to the initiative of the officer in command, who in campaign and in maneuvers must conform his actions to actual conditions, even departing in necessary cases from the letter of the Regulations.

These regulations will become applicable upon receipt by the organization commanders.

Each officer of the Cavalry Service will submit in the month of June, 1915, a report embodying his opinion of and recommendations as to changes or modifications in these Regulations.

By order of the Secretary of War:

LEONARD WOOD,
Major General, Chief of Staff.

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PREFACE.

These regulations have been prepared with a view of training Cavalry to fulfill its rôle as laid down in Bulletin No. 18, War Department, October 3, 1912, as follows:

1. Mounted action is the main rôle of the Cavalry Arm and its organization, armament, and instruction should be with a view to rendering it effective in such action.

Dismounted action is, however, a very important rôle of the Cavalry, and neither an organization nor the method of instruction which fails to provide for the effective use of Cavalry dismounted will enable it to perform fully its functions in war.

2. The organization should be such as to permit of the greatest mobility, which is the essential quality of the Cavalry, while providing units of great smashing power in the charge and a sufficient number of rifles to make effective its use when required as a dismounted force.

3. Cavalry must maneuver freely and widely without fearing too much for its rear; and being often at a distance from the main body of an army, its commander must be clothed with authority to conform to actual conditions.

4. While the chief task of the Cavalry is to assist the other arms in accomplishing the common object, its rôle is often of primary importance. The action of Cavalry must be bold and daring; it must, whenever practicable, assume the initiative, seeking out the enemy and placing him upon the defensive.

5. The principal weapon of Cavalry in mounted action is the horse and the force of impact should be utilized to the utmost. The terrain and nature of the operations will determine which of the other weapons must be used.

6. When circumstances permit, Cavalry opposed to Cavalry should fight mounted, thus retaining the mobility and power of maneuver necessary to its security and success.

7. The historical value of Cavalry, including the experience and evolution of our own and that of other countries, must be carefully studied, and due consideration should be given to the greater magnitude of our future Cavalry operations as compared with our experiences since the Civil War.

8. The use to which Cavalry should be put in campaign is summarized as follows:

(a) To seek and destroy the enemy's Cavalry.

- (b) Screening, contact, and reconnaissance.
- (c) Seizing and holding important advanced or isolated positions, thus delaying the advance of the enemy until the arrival of the other arms.
- (d) To operate on the flank and in rear of the enemy.
- (e) Raids and other enterprises requiring great mobility.
- (f) The mounted charge at the opportune moment against Infantry or Field Artillery.
- (g) Energetic pursuit of a retreating enemy or covering retreat of its own forces.
- (h) When none of the above rôles has been assigned to it, Cavalry may go to the assistance (dismounted) of hard-pressed Infantry to fill gaps in the firing line.

Horsemanship, horse training, care of horses, horseshoeing, gymnastic exercises, and the use of arms have been included only so far as to make these regulations sufficiently complete to answer in the emergency of training volunteers in time of war, referring for the details of these subjects to special manuals.

Other subjects treated of in the old Cavalry Drill Regulations such as packing and trumpet marches have been entirely omitted as more properly subjects for special manuals.

The board has based the school of the trooper mounted and horse training on the system followed at the Mounted Service School and is indebted to Capt. Guy V. Henry, Seventh Cavalry, senior instructor, for valuable hints and criticism of this part.

Ceremonies have been simplified so as to use the forms of drill evolutions and dispense with memorizing special formations and movements not used for practical purposes.

The attention of those familiar with the former Drill Regulations is invited to the fact that the school of the trooper, mounted and dismounted, is for the *individual* training of the trooper and that the collective training begins with the school of the platoon; also that the schools of collective training are not to be used for remedying deficiencies of individual training; when this becomes necessary the means prescribed in the school of the trooper must be resorted to.

The use of formal commands in the school of the trooper has been minimized so as to render it unnecessary for the recruit to memorize and comprehend a formula of words before learning to execute a movement.

CAVALRY SERVICE REGULATIONS.

DEFINITIONS.

A body of troops in formation is composed of ranks and files. **A rank** is composed of two or more troopers side by side. **A file** is composed of two troopers one behind the other; a file is blank when it has no trooper in the rear rank.

A file leader is a trooper of the front rank, relative to the one who is behind him in the rear rank.

A file closer is an officer or noncommissioned officer, placed out of ranks, whose duty it is to supervise the men in ranks and see that the orders of the commander are carried out. For convenience, this term is applied to any man posted in the line of file closers.

Flank.—The right or left of a command in line or column; also the element on the right or left of a line.

In speaking of the enemy the terms right and left are used to designate the elements that would be so designated by him.

Wing.—The half of a regiment or larger body. Wings are termed "right" and "left" when in line, and "leading" and "rear" when in column or echelon.

Center.—The middle point or element of a command.

Interval.—The lateral space between men or units.

Distance.—The space between men or bodies of troops from front to rear. Distance is measured—mounted, from the groups of the rear-rank horses of a fraction to the heads of the front-rank horses of the following fraction; dismounted, from the backs of the rear-rank troopers of a fraction to the breasts of the front-rank troopers of the following fraction.

Depth.—The space included between the head and rear of a column, including the leading and rear elements.

Alignment.—The placing of several troopers or units on the same straight line; also the line on which such adjustment is made.

Line.—The formation in which the elements of a command are deployed and placed side by side. When the elements are not deployed into a continuous line the formation receives an appropriate designation; as, **line of squads**, **line of masses**.

Column.—The formation in which the elements of a command are placed one behind the other. A **platoon column** is a platoon in column of squads. A **squadron column** is a squadron in column of platoons.

Double column.—The formation of the regiment in which the squadrons of each wing are one behind the other in column of platoons, the two columns separated by an interval of 6 yards.

Evolutions.—Movements by which a command changes its position or passes from one formation to another.

Formation.—The regular placing of all the fractions of a command in line, column, or echelon.

Deployment.—An evolution in which the command extends its front, as in forming line from column.

Ployment.—An evolution in which the command diminishes its front, as in passing from line to column.

Rally.—The rapid grouping behind the chief of the elements of a command, whatever may have been their previous situation and formation.

The object of the rally is to reestablish cohesion with a view to immediate action, or to form line in a new direction where the regular method of forming line would be slow or difficult. It is executed in the order of arrival of the elements of the command without regard to their normal order. The formation in which each unit is rallied is fixed in the drill instructions for that unit.

Assembly.—The regular grouping, in normal order, behind the chief, of the dispersed elements of a command, whatever may have been their previous situation and formation. The object of the assembly is to place the command in regular formation without any preliminary evolution.

The formation which each unit takes in assembling is fixed in the drill instructions for that unit.

Foragers.—Mounted troopers distributed on a line at prescribed intervals.

Scouts.—Troopers detached from their commands, operating alone or in small groups, with a definite mission.

Skirmishers.—Dismounted troopers distributed on a line for fire action.

Defensive flank or flank guard.—An element of a command disposed with a view to protecting a wing or flank.

Offensive flank or flank attack.—An element of a command detached to threaten or attack the enemy's flank.

Disposition.—The distribution and assignment of the component parts of a command for the accomplishment of a common purpose.

Echelon.—A body of troops is **in echelon** with reference to another when it is more advanced or less advanced and unmask or uncovers the same, wholly or in part; units thus placed are called **echelons**.

Drill.—The exercises and evolutions taught on the drill ground.

Tactical exercises.—Operations against an outlined or represented enemy who is limited to prescribed directions or movements.

Maneuvers.—Operations against an outlined or actual force under a separate commander, who, within the limits of the scheme, is free to adopt any formations and make any movements he chooses.

Directing unit.—The unit on which the direction, pace, and alignment or relative positions of the several parts of a formation depend.

Dress.—The act of taking a correct alignment.

Horse-length.—A term of measurement (8 feet).

Gait.—One of the special forms of movement of the horse, as the walk, the trot, the gallop.

Pace.—The rate of speed of the gait.

BASIS OF THE SYSTEM.

Two essential principles govern all the mounted evolutions of Cavalry:

1. The chief must be able to lead his unit to the attack, remaining constantly the master of its direction and gait.

2. The unit must always preserve the order and cohesion indispensable to its success in the attack, and to this end the movements involved in any evolution must be few and simple.

The success of all actions in war depends upon the proper selection of the means to the end. Therefore each Cavalry commander must conform his actions to the actual conditions, departing when necessary from the *letter* of the regulations. The methods prescribed are devised to fit the general case. They are to be regarded as tools furnished to the various leaders, who, to secure uniformity and avoid confusion, must employ them in the ordinary case; but everything that is not foreseen by the regulations is left to the *initiative of those who execute the action*, and the interference of a chief is needed only when the actions of his subordinates are evidently erroneous.

DIRECTION AND GAIT.

In order that the chief may be able to direct his unit, it must follow him, marching in his trace and at his gait.

A directing unit must follow the chief, or move on the point designated by him; the other units regulate on this directing unit in all formations and in all evolutions. The directing unit is thus the base of the formation.

The inconvenience resulting from the fact that the leader is not in front of the center of the squadron or of the regiment when the number of component units is even is more than compensated for by the facility of leading. To increase this facility still more, the directing unit in the regiment and larger bodies is somewhat in advance of the others in line of columns and in line. This unit, distinctly detached and clearly visible, translates visually, by its formation, gait, and direction, the wishes of the chief. Practically the chief has therefore only to lead the directing unit; the other

units regulate upon it. If he wishes temporarily to move independently, he has only to indicate the direction and gait to the commander of this unit.

ORDER AND COHESION.

Order is the primary requisite for the proper execution of evolutions and for cohesion in the attack. *The regiment is in order when all its squadrons are individually in order, whatever their relative positions. It is of no importance that a squadron is not exactly in its place, if it is in order. On the other hand, nothing is gained if it be exactly in its place, if in arriving there or in retaining its position it be thrown into disorder. The squadron is therefore properly the unit of order.*

Cohesion results from the good order of the squadrons and from the flexibility of the articulation between them. It is never so necessary as at the moment of the attack.

As the surest means of securing the cohesion of a line the requirement for alignment has been limited to units not greater than a squadron. The regimental line is formed of squadrons individually aligned, but not aligned on each other and slightly echeloned in rear of the directing squadron. Very small intervals have been allowed, and these are destined to disappear at the moment of the attack.

This formation insures greater flexibility, order, and cohesion than one in which the squadrons are on the same line:

Greater flexibility, because the chief can make slight changes of direction, as he has to lead not a line of squadrons rigidly joined together, but a line of squadrons articulated, each one with free ground to its right and left;

Greater order, because each squadron has the same ease of movement as if it were alone, and because the elasticity of the echeloned formation facilitates the regularity of gait;

And, finally, greater cohesion, because there are no longer in the line the crowding effects which immediately reacted in sudden extensions, occurring often at the very moment of striking the enemy. The suppression of the intervals presents no difficulty, since there is no longer any possibility of crowding. The attacking line will therefore be more compact and will never show empty spaces. It will lose a little of its breadth of front, but will gain in penetrating power, and that is what is wanted. Enveloping attacks are not to be guarded against by extending the line, but by providing protecting elements on the flanks.

DEPLOYMENT.

The evolution of deployment should be the simplest and the clearest, because this is the final evolution before the attack. There must be no uncertainty for the platoon leaders in the squadron nor for the captains in the regiment.

The unit is faced toward its objective before deployment. This can always be done except in case of surprise.

The unit having been faced toward its objective, is deployed fanwise; this is the simplest method, since neither the chiefs nor the directing units have to change their places, and because the axis of movement of the unit is the same before, during, and after deployment. We thus have a single normal method of deployment and a single habitual command.

In case of surprise or when the terrain requires it a lateral deployment may be desirable. This is accomplished by a special command, which permits no doubt as to the direction of the deployment and which is confirmed by the position taken by the chief.

There are occasions when it is desirable to deploy at the gallop, but there are many others where promptness in completing the deployment is of first importance; the leading unit must then reduce the pace. Vigor of attack does not consist in speed of heads of columns laboriously overtaken by units more or less disordered by their efforts. The true effect comes from the cohesion of a united and compact body deployed without confusion or disorder and taking the charge as a unit.

GENERAL PRINCIPLES.

A. Except as otherwise specifically stated in these regulations, all bodies of troops are formed in double rank.

B. The elements of all commands larger than a squadron are echeloned when in line to preserve flexibility, avoid crowding, and eliminate the difficulty of maintaining an alignment in long fronts.

C. Line is formed on the chief, who, as a rule, will indicate the objective before forming line.

The directing unit follows the chief and becomes the base of the formation.

In forming line from column in an oblique direction the chief causes the head of the column to march in the new direction before ordering the deployment.

D. The chief is the *leader* of his unit. He marches in the direction and at the gait desired. He is followed by the directing unit upon which the other units of the same kind regulate. In column and in echelon the directing unit is that at the head. In line it is the center or right center unit, unless otherwise indicated by the chief.

The chief may leave the guidance of the directing unit to a subordinate, and so become free in his movements.

E. In movements from the *halt*, or when marching at the *walk*, if the gait be not specified in the command the directing unit takes or maintains the *walk*.

F. Line is formed to the front from column by increasing the gait of the rear elements without command or by indicating a gait *for them*. The head of the column preserves the gait of the march. When the formation must be hastened or executed in a restricted space, the leader diminishes the pace or gait of the leading element or halts it, according to the object in view.

G. Column is formed from line on the directing unit at the gait of march, or at the gait ordered. The other units take or maintain the slower gait or halt until they can take their places in column.

H. In all other movements, if the units have equal distances to go, they move at the gait of the march or at that indicated in the

command. If the distances are not equal, the directing unit maintains the gait of march or takes that of the chief; the other units take a correspondingly slower or faster gait, and on arriving at their places take the gait of the directing unit. The chief regulates the gait of the directing unit so as to facilitate the formation or to attain the object in view. *In all evolutions the elements of the command must be led to their places by the shortest practicable route.*

I. To avoid repetition, movements by or to the flank are explained for the right only. Unless specially excepted they can be executed by or to the left.

J. In turning about, unless otherwise indicated, officers and men turn to the left about when mounted and to the right about when dismounted.

K. Officers, and noncommissioned officers acting as platoon leaders, draw and return saber with the superior commander.

L. Means of communicating commands:

1. Signals.
2. Gait and direction of horse, and in general the example of the leader.
3. Voice.
4. In large commands, messengers.
5. Trumpet calls.
6. The whistle.

Any combination of the above.

The method or combination of methods best suited to the occasion must be employed.

Whatever means is used will be considered the equivalent of a verbal command.

The directing unit, by the example of its march, formation, and gait, explains clearly by visible signs the will of the chief.

There are two kinds of commands:

The *preparatory* command, such as **forward**, indicates the movement that is to be executed.

The command of *execution*, such as **MARCH, HALT, or ARMS**, causes the execution.

Preparatory commands are distinguished by boldface type, those of *execution* by **CAPITALS**.

The *preparatory* command should be given at such an interval of time before the command of *execution* as to admit of being properly understood; the command of *execution* should be given at the instant the movement is to commence.

If the instructor wishes to revoke a preparatory command, he does so by commanding: **AS YOU WERE.**

M. The principle governing the wording of commands is that the commander announces the result desired and leaves to the subordinate commanders the adoption of the proper means to obtain this result. Thus, in line, the captain commands **right oblique**, and not **platoons right half turn**. It then becomes necessary for the platoon commanders to command **right half turn** to obtain the result desired by the captain.

N. Exceptions to these general rules will be indicated when necessary.

SIGNALS.

In all movements, exercises, and evolutions commands will be transmitted by the simplest, most direct, and most efficient means suited to the occasion.

To avoid noise and confusion, signals with the arm or hand, head-dress, or the saber, when drawn, will be used except when darkness, fog, dust, or other causes render such signals invisible or *inappropriate*. The preparatory signals with the saber are made from the carry; with the hand or headdress, from the position of the hand at the side. The return to the carry or dropping the hand to the side from the preparatory signal is the command of execution.

Signals are explained for the arm and hand. When the saber is drawn it is held in prolongation of the arm except that when the signal is made by the fingers (as for platoons, squads, etc.) the saber is allowed to hang from the wrist by the saber knot or is grasped by the left hand.

Signals should be made clearly, and with vigor and precision. The manner in which a movement is executed is determined largely by the manner in which the command is given.

It is of great importance that the signal should be plainly visible to those concerned in its execution; it should be repeated, if necessary.

The whistle blast may be used by the commander to attract attention.

In movements in extended order the signal for the unit should precede the signal for extension.

In addition to the signals herein prescribed the gait and direction of motion of the leader's horse and the example of the directing unit all serve to convey the leader's commands.

1. **Attention.**—Raise the arm vertically to its full extent and describe slowly small circles with the hand. This signal may precede any command.

2. **Forward.**—Stretch the arm in the direction to be taken.

3. **Assemble.**—Same as attention except that the circles are made larger and with the forearm.

4. **Rally.**—Describe horizontal circles *rapidly* about the head, with the arm as nearly extended as possible.

5. **To increase the gait.**—Raise and lower the hand rapidly from a position near the shoulder.

6. **To decrease the gait.**—Raise the right arm laterally and place the hand just above the head.

7. **Halt.**—Extend the arm vertically, and retain it in that position until the directing unit has halted.

8. **To change direction.**—Extend the arm fully in the direction of the marching flank and then make a slow sweeping movement toward the new direction; move the horse in this direction.

9. **Oblique.**—Extend the arm fully in the direction of the oblique, and move the horse in that direction.

10. **Line.**—Raise the arm vertically and, with the arm fully extended, wave well down to the right and left several times, swaying the body with the movement of the arm.

11. **Squads, half-squads, or files.**—Extend the arm vertically; show four fingers, two fingers, or one finger.

12. **Extend.**—Sweep the arm, fully extended, slowly and horizontally across the body, swaying and turning the body with the sweep of the arm.

13. **As foragers or skirmishers.**—Extend the arm and move it *rapidly* several times in a horizontal plane to the right and left.

14. **To the rear.**—Turn in the saddle, or face about if on foot, and extend the arm fully to the rear.

15. **Fight on foot.**—Strike three or four blows with the clenched fist in the direction in which the action is desired. In striking the point of the elbow should be higher than the shoulder.

16. **To dismount.**—Extend the arm diagonally upward to the right, palm downward, and wave several times toward the ground.

17. **To mount.**—Extend the arm horizontally to the right, palm upward, and wave upward several times.

18. **Platoons.**—Raise the right elbow to the height of the shoulder, forearm vertical, hand closed.

19. **Column.**—Describe circles on the right in a vertical plane with the arm fully extended.

20. **Double column.**—Extend the arm fully and describe a circle in a vertical plane from front to rear and, without pausing, from rear to front.

21. **Mass.**—Extend the arm horizontally to the right and bring the hand repeatedly to the point of the shoulder.

PART I.—TRAINING.

DUTIES AND RESPONSIBILITIES OF REGIMENTAL OFFICERS.

1. The *colonel* is charged with the application of these regulations in so far as they pertain to his regiment.

He is responsible for the instruction, efficiency, and harmonious cooperation of his officers, and must vigilantly preserve for each the initiative pertaining to his sphere of responsibility.

Unity of purpose and convergence of effort can be secured only through the impulse of the will of the chief transmitted through his agents. To this end the colonel will personally direct the instruction of his field officers and captains in all that pertains to their rôle and their duties in peace and war, and will assure himself that all his officers maintain themselves in fit physical condition for active campaign.

2. The *lieutenant colonel* aids the colonel in the execution of his task in such manner as the colonel may direct, supervises the execution of his orders, and in his absence takes his place and assumes his duties.

3. The *majors* may be placed in charge of half-regiments or assigned by the colonel to other duty of instruction and administration. They are responsible for the state of preparation for war of any squadrons committed to their charge.

They will see that the results desired by the colonel are attained, leaving to the captains a large initiative in the choice of means.

4. The *captains* are responsible for the instruction and preparation for war of their squadrons.

They should have a large liberty as to the means employed. The end to be attained having been indicated, superior authority should interfere in the instruction of the squadron only when necessary to insure diligence, to rectify mistakes, or to prevent omissions.

Within the limits set by the regimental and brigade commanders the captain will vary the nature of his exercises and instruction in order to maintain interest.

He will personally direct the education of his lieutenants and noncommissioned officers and the training of his cooks, farriers,

horseshoers, saddlers, wagoners, and trumpeters in so far as this is conducted within the squadron, and will exercise a constant personal supervision over all the instruction imparted to his squadron.

The squadron being the true unit of instruction, the captain's duties are of the greatest importance and require his constant attention and undivided interest.

5. The *lieutenants* share with their captain the responsibility for the moral and military training of their men as well as for their appearance, and for the condition of the horses, arms, and equipments of their platoons.

They are responsible to the captain for the collective training of their platoons and for the individual instruction of their men and horses in so far as this has not been otherwise provided for.

They should know the antecedents, character, ability, and special fitness of every man under their command and the temper, endurance, and capability of every horse committed to their charge, and be able to judge accurately what can be expected of each man and horse.

6. The *adjutant* and the *quartermaster* perform the functions imposed upon them by Army Regulations and assist the colonel in the discharge of his duties.

INSTRUCTION.

GENERAL PRINCIPLES.

7. The instruction of his command in all that pertains to its duties in war is, next to effective leadership, the most important duty devolving upon a commander. All other service functions must be subordinate to it.

Officers and noncommissioned officers are charged with a responsibility commensurate with their grade or rank for the performance of this most important duty. They must devote to it their best efforts and their unremitting care and attention.

Instruction must not be limited to mere professional training, but must be extended to include the moral education and physical development essential to success in war.

It must not only develop the memory and intelligence of the trooper, but must awaken in him a sense of pride in his profession, a confidence in his ability to overcome his enemy, a feeling of devotion to his leaders, and that pride in his country's institutions and past achievements which increases patriotism.

Such instruction tends more surely to the inculcation and enforcement of discipline than do the most exacting orders and regulations.

8. The instruction in the regiment must be conducted during the entire year so as to fulfill the following conditions:

- (a) The regiment must at all times be prepared to take the field.
- (b) Recruits must be brought as rapidly as is consistent with thorough training to a state of preparation for field service.
- (c) The system must be such as to bring the regiment to a proper state of preparation for participation in the annual maneuvers or field exercises.

9. Taking into consideration the local conditions the brigade commanders will regulate the employment of time and the rate of progress.

They will assure themselves of results obtained by suitable personal inspections.

10. Instruction in maneuvers and in marching and camping should be carried out at the same time, and in the manner and season best suited to the climate and other conditions.

11. Tactical exercises should be held frequently; always with an indicated enemy and under conditions approaching as nearly as possible those of war. The units participating must be under their permanent leaders and at as nearly full strength as conditions will permit.

12. It must be the effort of every leader to awaken in his subordinates the spirit of initiative and mutual helpfulness *and to develop to the greatest extent that aggressive desire to close with the enemy which in war is the first condition of success.*

13. The course of instruction will comprise:

- (a) The instruction of officers, noncommissioned officers, and special grades.
- (b) The instruction of the trooper individually and in the various units.

The first has for its object the preparation of officers and non-commissioned officers for the performance of their duty as instructors and leaders of units and of the men of special grades (cooks, trumpeters, farriers, horseshoers, wagoners, and saddlers), for the performance of their functions. It must include every detail of service and all the operations in which cavalry may be called upon to participate in war.

14. To impart instruction efficiently officers and noncommissioned officers must be able to execute, with the greatest degree

of skill, all that they are called upon to teach others, and must understand and use to practical advantage the methods of instruction recognized as the best.

To be able to lead their units without hesitation and with success they should be practiced in assuming situations in which they will find themselves in war and in indicating the most rapid and simple measures to meet the conditions. They will be tested from time to time in their knowledge of that portion of these regulations and of the service manuals bearing upon their duties, and will be required to solve map and terrain problems based upon situations which they would probably meet in war.

15. The colonel is charged with the instruction of the field officers and captains and the regimental noncommissioned staff; the captains with the instruction of the lieutenants, noncommissioned officers, and special grades of their squadrons.

INSTRUCTION OF OFFICERS.

16. The worth of a command to the Government depends largely upon the training and knowledge of its officers.

Nothing should be neglected which will tend to increase their professional knowledge or to elevate their moral and intellectual level.

Apart from the instruction imparted by their commanders, all officers should regard it as their duty to labor ceaselessly to perfect their military training, to keep themselves abreast of all progress in their arm, and to study the conditions and necessities of modern war. They must possess, as a foundation for all training, a thorough theoretical and practical knowledge of horsemanship, of the regulations concerning their arm, and of the duties they will be called upon to assume in peace or war.

In addition, they should have a thorough knowledge of the organization, formations, and tactics of the other arms, of topography, fortification, and other military subjects that bear upon the great variety of missions with which they may be charged. For this purpose full use should be made of the presence of troops of other arms in the garrison or in maneuvers.

Map and terrain exercises should be devised to enable the officers to make practical application of what they have learned. These exercises must be simple and entirely practical and suited to the grade of the officer under instruction. Their principal aim should be to train the officer to grasp quickly situations in war, to form

correct decisions, and to formulate from them clear and precise orders and reports.

Officers of all grades must acquire skill in the use of every arm carried by their men, and must keep up bold and vigorous riding.

An officer, not below the grade of captain, will be designated to give instruction in equitation to officers requiring it.

17. Officers should bear in mind that their manner of imparting instruction and their personal bearing and aptitude have a great influence upon the men under their charge. A sound soldierly spirit can not be developed by rules, but much can be accomplished by force of example in teaching high ideals of personal conduct and in training men to meet privations cheerfully and never to grumble at work or hardship.

INSTRUCTION OF NONCOMMISSIONED OFFICERS.

18. Noncommissioned officers must be able to instruct in the school of the trooper and of the platoon, to assist their officers in the details of service, and to replace them in case of necessity.

Their theoretical instruction will embrace such of these regulations as pertain to their duties, to include the school of the trooper, the platoon, and the squadron, the Small-Arms Firing Manual, Field Service Regulations, interior economy of the squadron, and elementary lessons in hygiene and hippology.

Their practical instruction will embrace all that is necessary to prepare them for their duties as instructors, for their functions in the school of the platoon and squadron, and for any missions with which they may be charged in war.

They must be trained to comprehend the formations and movements of troops of all arms, to read a map readily, and to write a succinct report accompanied, when necessary, by a sketch showing the location and disposition of troops.

The colonel may designate an officer to perfect and develop the training in equitation of the noncommissioned officers of his command.

INSTRUCTION OF THE SPECIAL GRADES.

19. To replace casualties among the cooks, farriers, horseshoers, and saddlers who are graduates of the service schools, the captain will cause instruction to be given to selected privates who show aptitude for these duties.

The trumpeters will be trained and instructed by the chief trumpeter under the supervision of the adjutant.

The wagoners will be instructed in the principles of draft, the care of wagons, and the care and fitting of harness.

INSTRUCTION OF THE TROOPER.

20. The instruction of the trooper is conducted in each squadron under direction of the captain, who is assisted by his officers and noncommissioned officers according to their several aptitudes and grades. The course of instruction should be so arranged as to bring the trooper to the highest degree of efficiency at the time of the annual maneuvers.

While the captain should carry on this instruction according to a systematic, prearranged plan, he must be left free to alter his plan to meet unforeseen conditions. Adherence to a routine system will not be required, and the interference of superiors will be limited to the correction of errors and the indication of omissions.

All instruction must be conducted with a view to fitting the trooper to play his part in war.

Equitation, the use of arms, and the cultivation of morale are the essential elements.

21. In the daily tasks constant effort should be made to develop in the trooper a taste for physical exercise; to perfect his knowledge of the horse and of his capacity and limitations and of the care that should be given him; and to assure the proper care, fit, and adjustment of the equipment and the habitual care of arms.

22. The instruction in small-arms practice and swordsmanship must be conducted with the view of giving to the trooper complete confidence in his ability to overcome his enemy with whatever weapon he may be called upon to meet him.

23. Instruction in field service should be so arranged as to prepare the trooper for the duties that will fall to him in campaign, to develop and guide his initiative, and to instill in him the spirit of the offensive. It should include instruction in semaphore signaling and in first aid to the injured.

24. Instructors must endeavor from the first to acquire a knowledge of the character and aptitude of each trooper under their charge. They should exercise patience and avoid familiarity. The work should be so regulated that all troopers will have at least one mounted exercise daily except Sunday.

25. Before beginning work the instructor will assure himself that those under his charge are neatly dressed in proper uniform, and that horses are properly groomed and equipments in order.

Saddles will be habitually stripped with the exception of the arms required, but sufficient instruction will be given in full field equipment to assure proper preparation for field service.

26. Recruit instruction will receive the special attention of the captain and will be so conducted as to prepare the recruit, as quickly as is consistent with thorough work, to take his place in ranks.

This will be accomplished when the recruit:

(a) Is able to ride his horse on the bit with one hand at all gaits.

(b) Has learned to care for his horse, pack his saddle, and take proper care of his arms and equipments.

(c) Has mastered the use of his arms mounted and dismounted.

(d) Has acquired an elementary knowledge of field service.

The captain is the judge as to when this proficiency has been attained. Undue haste in placing the recruits in ranks must be avoided, since it leads to loss of time in the school of the platoon and squadron.

COLLECTIVE INSTRUCTION.

27. The time which should be apportioned to each item of collective instruction must vary with the circumstances. Ample time must be allotted to the school of the squadron.

During the time devoted to the instruction of the larger units, commanders of the smaller units must take advantage of all opportunities to continue the instruction of their commands.

The captain will decide when the instruction in the school of the squadron shall be begun. He will assure himself before undertaking this instruction that each lieutenant has brought his platoon to a proper state of preparation.

The colonel designates the period to be devoted to the school of the regiment.

The training of regiments in brigades, and of brigades in divisions, with the proper complement of horse artillery and auxiliary troops, is important, both to insure cooperation and to give practice to the higher leaders and their staffs.

A reasonable period of the time available for such training should be devoted to drill to render the force supple and handy.

THE SCHOOL OF THE TROOPER, DISMOUNTED.

28. The object of this school is to develop the strength and agility of the trooper, to give him a military bearing, to fix in him the habit of sustained attention and instant obedience, to prepare him for instruction in mounted combat with the saber and pistol, and to train him in dismounted combat with the rifle.

In order to make rapid progress in those exercises which form the basis of instruction of the trooper, it is necessary that the lessons should, as far as practicable, be given individually.

29. The instructor explains briefly each movement, first executing it himself if practicable. He requires the recruits to take the proper positions unassisted and does not touch them for the purpose of correcting them, except when they are unable to correct themselves. He avoids keeping them too long at the same movement, although each should be understood before passing to another. He exacts by degrees the desired precision and uniformity. Recruits should be allowed to stand at ease frequently. During these pauses the instructor will not be idle, but opportunity will be taken to talk to the men, to encourage them to ask questions, and so to develop their confidence and common sense.

30. In order that all may advance as rapidly as their abilities permit, the recruits are grouped according to proficiency as instruction progresses. Those who lack aptitude and quickness are separated from the others and placed under experienced drillmasters.

INSTRUCTION WITHOUT ARMS.

31. For preliminary instruction a number of recruits, usually three or four, are formed as a squad.

To form the squad the instructor commands: **FALL IN.**

The men assemble at attention, and are arranged by the instructor in single or double rank, with or without intervals.

The instructor makes use of such parts of the school of the platoon as may be necessary in marching the squad to and from the ground and in instruction. He keeps in mind, however, that this instruction is individual and that the collective instruction begins in the platoon.

To dismiss the squad: **DISMISSED**

POSITION OF THE TROOPER, DISMOUNTED, OR ATTENTION.

32. Heels on the same line and as near each other as the conformation of the man permits.

Feet turned out equally and forming an angle of about 45° .

Knees straight without stiffness.

Hips level and drawn back slightly; body erect and resting equally on hips; chest lifted and arched; shoulders square and falling equally.

Arms and hands hanging naturally, thumb along the seam of the breeches.

Head erect and squarely to the front, chin drawn in so that the axis of the head and neck is vertical; eyes to the front.

Weight of the body resting equally upon the heels and balls of the feet.

THE RESTS.

33. Being at a halt, the commands are: **FALL OUT; REST; AT EASE;** and, 1. **Parade,** 2. **REST.**

At the command **fall out**, the men may leave the ranks, but are required to remain in the immediate vicinity. They resume their former places, at attention, at the command **fall in**.

At the command **rest**, each man keeps one foot in place, but is not required to preserve silence or immobility.

At the command **at ease**, each man keeps one foot in place and is required to preserve silence but not immobility.

1. **Parade,** 2. **REST.** Carry the right foot 6 inches straight to the rear, left knee slightly bent; clasp the hands, without constraint, in front of the center of the body, fingers joined, left hand uppermost, left thumb clasped by the thumb and forefinger of the right hand; preserve silence and steadiness of position.

34. To resume the attention: **ATTENTION.**

The men take the position of the trooper, dismounted.

EYES RIGHT OR LEFT.

35. 1. **Eyes,** 2. **RIGHT,** 3. **FRONT.**

At the command **right**, turn the head to the right oblique, eyes fixed on the line of eyes of the men in, or supposed to be in, the same rank. At the command **front**, turn the head and eyes to the front.

FACINGS.

36. To the flank: 1. Right, 2. FACE.

Raise slightly the left heel and right toe; face to the right, turning on the right heel, assisted by a slight pressure on the ball of the left foot; place the left foot by the side of the right. Left face is executed on the left heel in the corresponding manner.

37. To the rear: 1. About, 2. FACE.

Carry the toe of the right foot about a half foot-length to the rear and slightly to the left of the left heel without changing the position of the left foot; face to the rear, turning to the right on the left heel and right toe; place the right heel by the side of the left.

SALUTE WITH THE HAND.

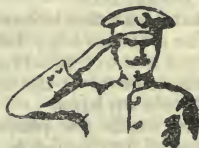
38. 1. Hand, 2. SALUTE.

Raise the right hand smartly till the tip of forefinger touches the lower part of the headdress above the right eye, thumb and fingers extended and joined, palm to the left, forearm inclined at about 45°, hand and wrist straight. (2) Drop the arm smartly by the side. The salute is made only with the right hand.

When saluting, officers and men look toward the person saluted.

If uncovered, stand at attention, without saluting.

For rules governing salutes, see "Honors."



Hand SALUTE

SETTING-UP EXERCISES.

39. The object of these exercises is to improve the bearing of the recruit and to develop his strength, agility, and endurance.

The instructor should avoid all constraint in these exercises and endeavor to vary them in such a way as to render the work attractive. He should adapt his requirements to the abilities of the troopers under his charge and endeavor to arouse a spirit of emulation.

Only such exercises are herein prescribed as are necessary to strengthen and supple the muscles in ordinary use and to develop

the respiratory organs. The instructor may make use of such of the exercises prescribed in the authorized Manuals of Gymnastics as may appear to him to be suited to the progress and development of the recruit.

40. Should the troopers be formed in ranks the instructor first causes the rear rank to move back to a suitable distance and then gives the command:

1. **On** (such) trooper, 2. **At** (so many) yards interval, 3. **MARCH.**

The troopers take the prescribed interval and face to the front.

To assemble: 1. **On** (such) trooper, 2. **ASSEMBLE.**

All movements are executed from the position of attention.

INITIAL POSITIONS.

41. Whenever the setting-up exercises require an initial position the instructor indicates it and causes it to be taken at the command: **IN POSITION.**

Hands at the breast.

The arms are bent, forearms at the height of the shoulders, hands opened and extended in prolongation of the forearms, fingers joined, palms downward; the shoulders are kept low and carried back.

Hands on hips.

The hands are placed on the points of the hips, the fingers extended and joined in prolongation of the forearms, the thumbs in rear; the elbows are drawn back; the shoulders are kept low and carried back.

Straddle.

Carry the right foot about 24 inches to the right of the left, the weight of the body borne equally on the two legs.

EXERCISES OF THE ARMS, LEGS, AND TRUNK.

42. After causing the initial position to be taken, in case that should be necessary, the instructor announces the movement to be executed and commands: **COMMENCE.**

The troopers execute the movement without endeavoring to regulate on each other. A maximum of amplitude is allowed in the exercises, but violent movements must be avoided and the parts of the body not embraced in the exercise kept immobile.

When the troopers are familiar with the exercises they may be executed in unison. The instructor indicates the cadence.

The flexions of the body and lower limbs are always executed slowly.

The movement is repeated until the command **HALT**, when it is concluded without haste and the position of attention resumed.

43. Raising the arms.

Raise and extend the arms to the front at a distance apart equal to the width of the shoulders, the palms toward each other, until the arms are in prolongation of the body and force them back as far as possible; lower the arms, still extended, to the front and return to the position of attention.

44. Lateral extension of the arms (from hands at the breast).

Extend the arms laterally at the height of the shoulders, carrying them as far to the rear as possible, the palms of the hands downward, the shoulders kept low and forced back without bending or hollowing the back; return to the initial position.

45. Rotation of the arms.

Execute the first motion of raising the arms, then lower them and extend them laterally, palms of the hands downward; carry the arms to the rear as far as possible, turning the palms of the hands toward each other, and return to the position of attention.

46. Flexion of the legs (from hands on hips).

Rise upon the toes; bend the legs, spreading the knees apart with the heels elevated and joined, and sit down on the heels, keeping the body erect; rise again on the toes; resume the initial position.

47. Extension of the right or left leg to the front, rear, or laterally (from hands on hips).

Raise the right or left leg to the front, rear, or laterally with the foot extended; resume the initial position.

48. Bend to the front (from hands on hips).

The body is inclined slowly to the front with the back bent and the head in prolongation of the trunk. Return slowly to the initial position.

49. Bend to the right (from straddle, hands on hips).

The body is slowly inclined laterally without deranging the position of the hips. The head, shoulders, and arms conform to the movement of the trunk. Return slowly to the initial position.

50. Rotation of the body (from straddle, hands on hips).

Turn the body slowly from right to left and from left to right without deranging the position of the hips. The head, shoulders, and arms conform to the movement of the trunk. Return slowly to the initial position.

51. Being at attention or at the straddle: BREATHING EXERCISE.

Inhale a deep breath, keeping the mouth closed. Follow with a complete expiration.

Every gymnastic drill and every series of violent exercises should be concluded with breathing exercises.

RUNNING.

52. Running is the most effective means of developing the respiration. It increases endurance and accustoms the trooper to the violent exertion necessary in dismounted combat.

This exercise must be conducted in accordance with a prudent system of progression in order to avoid harmful excess, and care must be taken not to exceed the limit of endurance of the troopers.

53. A noncommissioned officer is placed at the head of the squad to set the pace.

The length of the step in running is 36 inches. The weight of the body is borne on the toes. The body is inclined forward and the knees bent. The hands, closed, are at the height of the hips, the elbows a little to the rear, and the arms have a natural swinging motion.

The running is preceded by several minutes of marching at quick time. Then the running step is taken up, the pace being slow at first and gradually increasing to the cadence of double time. After a few minutes the pace is increased to the limit of speed of the slowest men. The increased pace should not be maintained, for recruits, for more than 50 yards.

In order to avoid becoming winded or out of breath the expiration should always be as complete as possible.

JUMPING.

54. These exercises are for the purpose of developing the energy and agility of the trooper, and consist of high jumps, broad jumps, and downward jumps. They are executed separately or in combination.

In executing the standing jumps the trooper bends his legs, raises his heels slightly, and carries his arms more or less to the rear. He then vigorously straightens his legs in order to clear the obstacle, raising his arms in the air in case of a high jump and

carrying them to the front in case of a broad jump. He extends his legs while his body is falling and bends them sufficiently to lessen the shock on alighting; the arms are extended without stiffness.

In executing the running jumps the trooper takes a vigorous start at a fast pace, shortening the steps when near the obstacle. He then gives himself an impulse with either foot, raising his arms upward or to the front, and alights as in the standing jump.

During the outdoor drills the troopers are trained in jumping with the rifle in hand over such obstacles as are likely to be met with in campaign.

55. The instructor should devote a short period during each drill in individual instruction to gymnastic exercises.

SWIMMING.

56. Instruction and practice in swimming will be given to all recruits as early as practicable.

Advantage will be taken of all subsequent opportunities to carry forward this instruction until the trooper is able to swim fully clothed and with full equipment. To avoid ruining the rifle and belts a few dummy equipments, simulating in size and weight the articles carried on the soldier's person in campaign should be extemporized for this purpose.

Good swimmers will be found in every body of troops, and these should be utilized to instruct those who can not swim.

STEPS AND MARCHINGS.

57. All steps and marchings executed from a halt, except right step, begin with the left foot.

The length of the full step in quick time is 30 inches, measured from heel to heel, and the cadence is at the rate of 120 steps per minute. The length of the full step in double time is 36 inches and the cadence is at the rate of 180 steps per minute.

All steps and marchings, and movements involving marching, are executed in *quick time* unless the squad be marching in *double time*, or *double time* be added to the command; in the latter case *double time* is added to the preparatory command.

QUICK TIME.

58. Being at a halt, to march forward in quick time: 1. **Forward**, 2. **MARCH**.

At the command **forward**, shift the weight of the body to the right leg, left knee straight.

At the command **march**, move the left foot smartly straight forward 30 inches from the right, sole near the ground, and plant it without shock; next, in like manner, advance the right foot and plant it as above; continue the march. The arms swing naturally.

59. Being at a halt, or in march in quick time, to march in double time: 1. **Double time**, 2. **MARCH**.

If at a halt, at the first command shift the weight of the body to the right leg. At the command **march**, raise the forearms, fingers closed, until the hands are at the height of the hips, elbows slightly to the rear; take up an easy run with the step and cadence of double time, swinging the arms freely from the shoulder.

If marching in quick time, at the command **march**, given as either foot strikes the ground, take one step in quick time, and then step off in double time.

To resume the quick time: 1. **Quick time**, 2. **MARCH**.

At the command **march**, given as either foot strikes the ground, advance and plant the other foot in double time; resume the quick time, dropping the hands by the sides.

TO MARK TIME.

60. Being in march: 1. **Mark time**, 2. **MARCH**.

At the command, **march**, given as either foot strikes the ground, advance and plant the other foot; bring up the foot in rear and continue the cadence by alternately raising each foot about 2 inches and planting it on line with the other.

Being at a halt, at the command **march**, raise and plant the feet as described above.

SIDE STEP.

61. Being at a halt or mark time: 1. **Right step**, 2. **MARCH**.

Carry and plant the right foot 15 inches to the right; bring the left foot beside it and continue the movement in the cadence of quick time.

The side step is used for short distances only and is not executed in double time.

If at order arms, the side step is executed at trail without other command.

BACK STEP.

62. Being at a halt or mark time: 1. **Backward**, 2. **MARCH**. Take steps of 15 inches straight to the rear.

The back step is used for short distances only and is not executed in double time.

If at order arms, the back step is executed at trail without other command.

TO HALT.

63. To stop the march in quick or double time: 1. **Squad**, 2. **HALT**.

At the command **halt**, given as either foot strikes the ground, plant the other foot as in marching; raise and place the first foot by the side of the other. If in double time, drop the hands by the sides.

TO MARCH BY THE FLANK.

64. Being in march: 1. **By the right flank**, 2. **MARCH**.

The troopers individually face to the right in marching and step off in the new direction.

TO MARCH TO THE REAR.

65. Being in march: 1. **Troopers to the rear**, 2. **MARCH**.

Turn to the right about, taking four steps in place, keeping the cadence, and then step off with the left foot.

CHANGE STEP.

66. Being in march: 1. **Change step**, 2. **MARCH**.

At the command **march**, given as the right foot strikes the ground, advance and plant the left foot; plant the toe of the right foot near the heel of the left and step off with the left foot.

The change on the right foot is similarly executed, the command **march** being given as the left foot strikes the ground.

INDIVIDUAL INSTRUCTION WITH ARMS.

ARMAMENT FOR GARRISON DUTY, DISMOUNTED.

67. Complete armament: Rifle and pistol.

For guard, drill, and inspection: As may be directed.

For duty out of ranks, as orderly, witness, etc.: Pistol and garrison belt, or garrison belt alone, as may be directed.

Full dress or dress: Rifle and garrison belt.

The saber is not worn dismounted.

Spurs are not worn on dismounted duty.

MANUAL OF THE RIFLE.

68. As soon as practicable the recruit is taught the nomenclature, care, and use of his rifle; when fair progress has been made in the instruction without arms, he is taught the manual of arms; instruction without arms and that with arms alternate.

69. The following rules govern the carrying of the rifle:

First. The rifle is not carried with cartridges in either the chamber or the magazine except when specifically ordered. When so loaded, or supposed to be loaded, it is habitually carried locked; that is, with the *safety lock* turned to the "safe." At all other times it is carried unlocked, with the trigger pulled.

Second. Whenever troops are formed under arms, rifles are immediately inspected at the commands: 1. **Inspection**, 2. **ARMS**: 3. **Order (Right shoulder, port)**, 4. **ARMS**.

A similar inspection is made immediately before dismissal.

If cartridges are found in the chamber or magazine they are removed and placed in the belt.

Third. The cut-off is kept turned "off" except when cartridges are actually used.

Fourth. **Fall in** is executed with the rifle at the order arms. **Fall out**, **rest**, and **at ease** are executed as without arms. On resuming **attention** the position of order arms is taken.

Fifth. If at the order, unless otherwise prescribed, the rifle is brought to the right shoulder at the command **march**, the three motions corresponding with the first three steps. Movements may be executed at the trail by prefacing the preparatory command with the words **at trail**, as, 1. **At trail, forward**, 2. **MARCH**; the trail is taken at the command **march**.

When the facings, alignments, open and close ranks, taking interval, and assemblings are executed from the order, raise the rifle to the trail while in motion and resume the order on halting.

Sixth. The rifle is brought to the order on halting. The execution of the order begins when the halt is completed.

Seventh. A disengaged hand in double time is held as when without arms.

70. The following rules govern the execution of the manual of arms:

First. In all positions of the left hand at the balance (center of gravity) the thumb clasps the rifle; the sling is included in the grasp of the hand.

Second. In all positions of the rifle "diagonally across the body" the position of the rifle, left arm and hand are the same as in port arms.

Third. In resuming the order from any position in the manual, the motion next to the last concludes with the butt of the rifle about 3 inches from the ground, barrel to the rear, the left hand above and near the right, steadying the rifle, fingers extended and joined, forearm and wrist straight and inclining downward, all fingers of the right hand grasping the rifle. To complete the order, lower the rifle gently to the ground with the right hand, drop the left quickly by the side, and take the position of order arms.

Allowing the rifle to drop through the right hand to the ground, or other similar abuse of the arm to produce effect in executing the manual, is prohibited.

Fourth. The cadence of the motions is that of quick time; the recruits are first required to give their whole attention to the details of the motions, the cadence being gradually acquired as they become accustomed to handling their rifles.

Fifth. The manual is taught at a halt and the movements are, for the purpose of instruction, divided into motions and executed in detail; in this case the command of execution determines the prompt execution of the first motion, and the commands, two, three, four, that of the other motions.

To execute the movements in detail, the instructor first cautions: **By the numbers**; all movements divided into motions are then executed as above explained until he cautions: **Without the numbers**, or commands movements other than those in the manual of arms.

Sixth. Whenever circumstances require, the regular positions of the manual of arms and the firings may be ordered without regard to the previous position of the rifle.

Under exceptional conditions of weather or fatigue the rifle may be carried in any manner directed.

71. Position of order of arms standing: The butt rests evenly on the ground, barrel to the rear, toe of the butt on a line with toe of, and touching, the right shoe, arms and hands hanging naturally, right hand holding the rifle between the thumb and fingers.

72. Being at order arms: 1. Present, 2. ARMS.

With the right hand carry the rifle in front of the center of the body, barrel to the rear and vertical, grasp it with the left hand at the balance, forearm horizontal and resting against the body.

(TWO) Grasp the small of the stock with the right hand.

73. Being at order arms: 1. Port, 2. ARMS.

With the right hand raise and throw the rifle diagonally across the body, grasp it smartly with both hands; the right, palm down, at the small of the stock; the left, palm up, at the balance; barrel up, sloping to the left and crossing opposite the junction of the neck with the left shoulder; right forearm horizontal; left forearm resting against the body; the rifle in a vertical plane parallel to the front.

74. Being at present arms: 1. Port, 2. ARMS.

Carry the rifle diagonally across the body and take the position of port arms.

75. Being at port arms: 1. Present, 2. ARMS.

Carry the rifle to a vertical position in front of the center of the body and take the position of present arms.

76. Being at present or port arms: 1. Order, 2. ARMS.

Let go with the right hand; lower and carry the rifle to the right with the left hand; regrasp it with the right hand just above the lower band; let go with the left hand, and take the next to the last position in coming to the order. **(TWO)** Complete the order.

77. Being at order arms: 1. Right shoulder, 2. ARMS.

With the right hand raise and throw the rifle diagonally across the body; carry the right hand quickly to the butt, embracing it, the heel between the first two fingers. **(TWO)** Without changing the grasp of the right hand, place the rifle on the right shoulder, barrel up and inclined at an angle of about 45° from the horizontal, trigger guard in the hollow of the shoulder, right elbow near the side, the rifle in a vertical plane perpendicular to the front; carry

the left hand, thumb, and fingers extended and joined, to the small of the stock, tip of the forefinger touching the cocking piece, wrist straight and elbow down. (**THREE**) Drop the left hand by the side.

78. Being at right shoulder arms: 1. Order, 2. **ARMS**.

Press the butt down quickly and throw the rifle diagonally across the body, the right hand retaining the grasp of the butt. (**TWO**), (**THREE**) Execute order arms as described from port arms.

79. Being at port arms: 1. Right shoulder, 2. **ARMS**.

Change the right hand to the butt. (**TWO**), (**THREE**) As in right shoulder arms from order arms.

80. Being at right shoulder arms: 1. Port, 2. **ARMS**.

Press the butt down quickly and throw the rifle diagonally across the body, the right hand retaining its grasp of the butt. (**TWO**) Change the right hand to the small of the stock.

81. Being at right shoulder arms: 1. Present, 2. **ARMS**.

Execute port arms. (**THREE**) Execute present arms.

82. Being at present arms: 1. Right shoulder, 2. **ARMS**.

Execute port arms. (**TWO**), (**THREE**), (**FOUR**) Execute right shoulder arms as from port arms.

83. Being at port arms: 1. Left shoulder, 2. **ARMS**.

Carry the rifle with the right hand and place it on the left shoulder, barrel up, trigger guard in the hollow of the shoulder; at the same time grasp the butt with the left hand, heel between first and second fingers, thumb and fingers closed on the stock. (**TWO**) Drop the right hand by the side.

Left shoulder arms may be ordered directly from the order, right shoulder, or present, or the reverse. At the command **arms** execute **port arms** and continue in cadence to the position ordered.

84. Being at left shoulder arms: 1. Port, 2. **ARMS**.

Grasp the rifle with the right hand at the small of the stock. (**TWO**) Carry the rifle to the right with the right hand, regrab it with the left, and take the position of port arms.

85. Being at order arms: 1. Parade, 2. **REST**.

Carry the right foot 6 inches straight to the rear, left knee slightly bent; carry the muzzle in front of the center of the body, barrel to the left; grasp the rifle with the left hand just below the stacking swivel, and with the right hand below and against the left.

Being at parade rest: **ATTENTION**.

Resume the order, the left hand quitting the rifle opposite the right hip.

86. Being at order arms: 1. Trail, 2. ARMS.

Raise the rifle, right arm slightly bent, and incline the muzzle forward so that the barrel makes an angle of about 30° with the vertical.

When it can be done without danger or inconvenience to others, the rifle may be grasped at the balance and the muzzle lowered until the rifle is horizontal; a similar position in the left hand may be used.

87. Being at trail arms: 1. Order, 2. ARMS.

Lower the rifle with the right hand and resume the order.

88. Being at right shoulder arms: 1. Rifle, 2. SALUTE.

Carry the left hand smartly to the small of the stock, forearm horizontal, palm of the hand down, thumb and fingers extended and joined, forefinger touching end of cocking piece; look toward the person saluted. (TWO) Drop left hand by the side; turn head and eyes to the front.

With the rifle on the left shoulder, the salute is rendered in a corresponding manner with the right hand.

89. Being at order or trail arms: 1. Rifle, 2. SALUTE.

Carry the left hand smartly to the right side, palm of the hand down, thumb and fingers extended and joined, forefinger against the rifle near the muzzle; look toward the person saluted. (TWO) Drop the left hand by the side; turn the head and eyes to the front.

90. Being at order arms: 1. Inspection, 2. ARMS.

At the second command, take the position of port arms. (TWO) Seize the bolt handle with the thumb and forefinger of the right hand, turn the handle up, draw the bolt back and glance at the chamber. Having found the chamber empty, or having emptied it, raise the head and eyes to the front.

91. Being at inspection arms: 1. Order (right shoulder, port), 2. ARMS.

At the preparatory command, push the bolt forward, turn the handle down, pull the trigger, and resume port arms. At the command Arms complete the movement ordered.

TO DISMISS.

92. Being at halt: 1. Inspection, 2. ARMS, 3. Port, 4. ARMS, 5. DISMISSED.

TO STACK AND TAKE ARMS.

93. Being in line in double rank, at a halt, and having counted fours: **STACK ARMS.**

Each even number of the front rank grasps his rifle with the left hand at the upper band and rests the butt between his feet, barrel to the front, muzzle inclined slightly to the front and opposite the center of the interval on his right, the thumb and forefinger raising the stacking swivel; each even number of the rear rank then passes his rifle, barrel to the rear, to his file leader, who grasps it between the bands with his right hand and throws the butt about 2 feet in advance of that of his own rifle and opposite the right of the interval, the right hand slipping to the upper band, the thumb and forefinger raising the stacking swivel, which he engages with that of his own rifle; each odd number of the front rank raises his rifle with the right hand, carries it well forward, barrel to the front; the left hand, guiding the stacking swivel, engages the lower hook of the swivel of his own rifle with the free hook of that of the even number of the rear rank; he then turns the barrel outward into the angle formed by the other two rifles and lowers the butt to the ground, to the right of and against the toe of his right shoe.

Rifles not used in making the stack are termed *loose rifles*.

The stacks made, the loose rifles are laid on them by the even numbers of the front rank.

When each man has finished handling rifles, he takes the position of attention.

94. Being in line behind the stacks: **TAKE ARMS.**

The loose rifles are returned by the even numbers of the front rank; each even number of the front rank grasps his own rifle with the left hand, the rifle of his rear-rank man with his right hand, grasping both between the bands; each odd number of the front rank grasps his rifle in the same way with the right hand, disengages it by raising the butt from the ground and then, turning the rifle to the right, detaches it from the stack; each even number of the front rank disengages and detaches his rifle by turning it to the left, and then passes the rifle of his rear-rank man to him, and all resume the order.

95. Should any squad have Nos. 2 and 3 blank files, No. 1 rear rank takes the place of No. 2 rear rank in making and breaking the stack; the stacks made or broken, he resumes his post.

In single rank the stack is made and broken by No. 2. No. 3 steps back and covers No. 2, and the stack is made and broken as above described, and No. 3 resumes his place.

LOADINGS AND FIRINGS.

KNEELING AND LYING DOWN.

96. If standing: **KNEEL.**

Half face to the right; carry the right toe about 1 foot to the left rear of the left heel; kneel on right knee, sitting as nearly as possible on the right heel; left forearm across left thigh; rifle remains in position of order arms, right hand grasping it above the lower band.

97. If standing or kneeling: **LIE DOWN.**

Kneel, but with right knee against left heel; carry back the left foot and lie flat on the belly, inclining body about 35° to the right; rifle horizontal, barrel up, muzzle off the ground and pointed to the front; elbows on the ground; left hand at the balance, right hand grasping the small of the stock opposite the neck. This is the position of order arms, lying down.

98. If kneeling or lying down: **RISE.**

If kneeling, stand up, faced to the front, on the ground marked by the left keel.

If lying down, raise the body on both knees; stand up, faced to the front, on the ground marked by the knees.

99. If lying down: **KNEEL.**

Raise the body on both knees; take the position of kneel.

100. In double rank, the positions of kneeling and lying down are ordinarily used only for the better utilization of cover.

When deployed as skirmishers, a sitting position may be taken instead of the position kneeling.

LOADINGS AND FIRINGS.

101. The commands for loading and firing are the same whether standing, kneeling, or lying down. The firings are always executed at a halt.

When kneeling or lying down in double rank, the rear rank does not load, aim, or fire.

The instruction in firing will be preceded by a command for loading.

Loadings are executed in line and skirmish line only.

102. Rifles having been ordered loaded are kept loaded without command until the command **unload** or **inspection arms**, fresh clips being inserted when the magazine is exhausted.

103. The aiming point or target is carefully pointed out. This may be done before or after announcing the sight setting. Both are indicated before giving the command for firing, but may be omitted when the target appears suddenly and is unmistakable; in such case battle sight (the leaf laid flat) is used if no sight setting is announced.

104. The target or aiming point having been designated and the sight setting announced, such designation or announcement need not be repeated until a change of either or both is necessary.

Troops are trained to continue their fire upon the aiming point or target designated, and at the sight setting announced, until a change is ordered.

105. If the men are not already in the position of load, that position is taken at the announcement of the sight setting; if the announcement is omitted, the position is taken at the first command for firing.

106. When deployed, the use of the sling as an aid to accurate firing is discretionary with each man.

To load.

107. Being in line or skirmish line at halt: 1. With dummy (blank or ball) cartridges, 2. **LOAD.**

At the command load, each front-rank man or skirmisher faces half right and carries the right foot to the right, about 1 foot, to such position as will insure the greatest firmness and steadiness of the body; raises, or lowers, the rifle and drops it into the left hand at the balance, left thumb extended along the stock, muzzle at the height of the breast, and turns the cut-off up. With the right hand he turns and draws the bolt back, takes a loaded clip and inserts the end in the clip slots, places the thumb on the powder space of the top cartridge, the fingers extending around the rifle and tips resting on the magazine floor plate; forces the cartridges into the magazine by pressing down with the thumb; without removing the clip, thrusts the bolt home, turning down the handle; turns the safety lock to the "safe" and carries the hand to the small of the stock. Each rear-rank man moves to the right front, takes a similar position opposite the interval to the right of his front-rank man, muzzle of the rifle extending beyond the front rank, and loads.

A skirmish line may load while moving, the rifles being held as nearly as practicable in the position of load.

108. For instruction in loading: 1. **Simulate**, 2. **LOAD**.

Executed as above described, except that the cut-off remains "off" and the handling of cartridges is simulated.

The recruits are first taught to **simulate** loading and firing; after a few lessons dummy cartridges may be used. Later, blank cartridges may be used.

109. The rifle may be used as a single loader by turning the magazine "off." The magazine may be filled in whole or in part while "off" or "on" by pressing cartridges singly down and back until they are in the proper place. The use of the rifle as a single loader is, however, to be regarded as exceptional.

To unload.

110. **UNLOAD.**

Take the position of load, turn the safety lock up and move bolt alternately back and forward until all the cartridges are ejected. After the last cartridge is ejected the chamber is closed by first thrusting the bolt slightly forward to free it from the stud holding it in place when the chamber is open, pressing the follower down and back to engage it under the bolt, and then thrusting the bolt home; the trigger is pulled. The cartridges are then picked up, cleaned, and returned to the belt, and the rifle is brought to the order.

To set the sight.

111. **RANGE, ELEVEN HUNDRED (EIGHT-FIFTY, ETC.), or BATTLE SIGHT.**

The sight is set at the elevation indicated. The instructor explains and verifies sight settings.

To fire by volley.

112. 1. **READY**, 2. **AIM**, 3. **Squad**, 4. **FIRE**.

At the command **ready**, turn the safety lock to the "ready"; at the command **aim**, raise the rifle with both hands and support the butt firmly against the hollow of the right shoulder, right thumb clasp the stock, barrel horizontal, left elbow well under the rifle, right elbow as high as the shoulder; incline the head slightly forward and a little to the right, cheek against the stock, left eye closed, right eye looking through the notch of the rear sight so as to perceive the object aimed at, second joint of fore-

finger resting lightly against the front of the trigger and taking up the slack; top of front sight is carefully raised into, and held in, the line of sight.

Each rear-rank man aims through the interval to the right of his file leader and leans slightly forward to advance the muzzle of his rifle beyond the front rank.

In aiming kneeling, the left elbow rests on the left knee, point of elbow in front of kneecap. In aiming sitting, the elbows are supported by the knees.

In aiming lying down, raise the rifle with both hands, rest on both elbows, and press the butt firmly against the right shoulder.

At the command **fire**, press the finger against the trigger; fire without deranging the aim and without lowering or turning the rifle; reload.

113. To continue the firing: 1. **AIM**, 2. **Squad**, 3. **FIRE**.

Each command is executed as previously explained. Load (from magazine) is executed by drawing back and thrusting home the bolt with the right hand, leaving the safety lock at the "ready."

To fire at will.

114. **FIRE AT WILL.**

Each man, independently of the others, comes to the ready, aims carefully and deliberately at the aiming point or target, **fires**, **loads**, and continues the firing until ordered to **suspend** or **cease firing**.

115. To increase (decrease) the rate of fire in progress the instructor shouts: **FASTER (SLOWER)**.

Men are trained to fire at the rate of about three shots per minute at effective ranges and five or six at close ranges, devoting the minimum of time to loading and the maximum to deliberate aiming. To illustrate the necessity for deliberation, and to habituate men to battle conditions, small and comparatively indistinct targets are designated.

To fire by clip.

116. **CLIP FIRE.**

Executed in the same manner as **fire at will**, except that each man, after having exhausted the cartridges then in the rifle, **suspends firing**.

To suspend firing.

117. The instructor blows a long blast of the whistle and repeats same, if necessary, or commands: **SUSPEND FIRING.**

Firing stops; rifles are held, loaded and locked, in a position of readiness for instant resumption of firing, sights unchanged. The men continue to observe the target or aiming point, or the place at which the target disappeared, or at which it is expected to reappear.

This whistle signal may be used as a preliminary to **cease firing.**

*To cease firing.***118. CEASE FIRING.**

Firing stops; rifles not already there are brought to the position of load, the cut-off turned down if firing from magazine, the cartridge is drawn or the empty shell is ejected, the trigger is pulled, sights are laid down, and the rifle is brought to the order.

Cease firing is used for long pauses to prepare for changes of position or to steady the men.

119. Commands for suspending or ceasing fire may be given at any time after the preparatory command for firing whether the firing has actually commenced or not.

THE USE OF COVER.

120. The recruit should be given careful instruction in the individual use of cover.

It should be impressed upon him that, in taking advantage of natural cover, he must be able to fire easily and effectively upon the enemy; if advancing on an enemy, he must do so steadily and as rapidly as possible; he must conceal himself as much as possible while firing and while advancing.

To teach him to fire easily and effectively, at the same time concealing himself from the view of the enemy, he is practiced in simulated firing in the prone, sitting, kneeling, and crouching positions, from behind hillocks, trees, heaps of earth or rocks, from depressions, gullies, ditches, doorways, or windows. He is taught to fire around the right side of his concealment whenever possible, or, when this is not possible, to rise enough to fire over the top of his concealment.

When these details are understood, he is required to select cover with reference to an assumed enemy and to place himself behind it in proper position for firing.

121. The disadvantage of remaining too long in one place, however good the concealment, should be explained. He should be taught to advance from cover to cover, selecting cover in advance before leaving his concealment.

It should be impressed upon him that a man running rapidly toward an enemy furnishes a poor target. He should be trained in springing from a prone position behind concealment, running at top speed to cover and throwing himself behind it. He should also be practiced in advancing from cover to cover by crawling, or by lying on the left side, rifle grasped in the right hand, and pushing himself forward with the right leg.

He should be taught that, when fired on while acting independently, he should drop to the ground, seek cover, and then endeavor to locate his enemy.

122. The instruction of the recruit in the use of cover is continued in the combat exercises of the platoon, but he must then be taught that the proper advance of the platoon or squadron and the effectiveness of its fire is of greater importance than the question of cover for individuals. He should also be taught that he may not move about or shift his position in the firing line except to get a better view of the target.

OBSERVATION.

123. In order to develop the faculty of rapid and accurate observation, which is of great importance in campaign, the recruit should be trained in taking notice of his surroundings, at first from selected positions and later at the various gaits.

He should be practiced under various conditions of weather in recognizing colors and forms; in pointing out and naming military features of the ground; in observing the effect of direction of light on distinctness of objects; in recognizing at gradually increasing distances the animate and inanimate objects ordinarily met with in the field; and in counting distant objects and in estimating the size of groups, such as herds of animals and bodies of troops.

124. In the training of men in the mechanism of the firing line, they should be practiced in repeating to one another target and aiming point designations and in quickly locating and pointing

out a designated target. They should be taught to distinguish, from a prone position, distant objects, particularly troops, both with the naked eye and with field glasses. Similarly, they should be trained in estimating distances.

MANUAL OF THE PISTOL.

125. Instruction under this head is first given on foot.

The recruit is first made familiar with the mechanism of the pistol, the names of the principal parts, and the method of cleaning, assembling, and operating it.

When a lanyard is used, the snaps are attached to the butt of the pistol and the magazine; the sliding loop is passed over the head and drawn snug against the right armpit. The lanyard should then be of just such length that the arm can be extended without constraint.

126. The pistol being in the holster, to raise pistol:

1. Raise, 2. PISTOL.

At the command **Raise**, unbutton the flap of the holster with the right hand and grasp the stock, back of hand outward.

At the command **Pistol**, draw the pistol from the holster, reverse it, muzzle up, the hand holding the stock with the thumb and last three fingers; forefinger outside of the guard; barrel to the rear and inclined to the front at an angle of about 30°; hand as high as the neck and 6 inches in front of the point of the right shoulder. **This is the position of raise pistol.** When dismounted, with intervals, carry the right foot about 24 inches to the right and place the left hand in the position of the bridle hand.

127. 1. Inspection, 2. PISTOL.

Execute **raise pistol** if not in that position. Lower the pistol under the left hand, retaining the grasp of the right hand; pistol pointing to the left front and downward; with the left hand, back up, pull back the slide until the slide stop is engaged, and resume **raise pistol**. If there be no magazine in the pistol, it will be necessary to engage the slide stop with the right thumb.

If dismounted, the left hand is raised to the position of the bridle hand while manipulating the mechanism.

128. 1. Return, 2. PISTOL.

Being at **raise pistol**, lower the pistol and raise the flap of the holster with the right thumb; insert the pistol in the holster and push it down; button the flap with the right hand. If the pistol be loaded, and not at "safe," *engage the safety lock with the right thumb* at the command **Return**.

Being at **inspection pistol**, lower the pistol as in executing **inspection pistol** and with the left thumb release the magazine catch slightly disengage the empty magazine) and the slide stop (to release the slide); engage the magazine, lower the hammer gently, and return the pistol as previously explained.

129. **LOAD.**

Being at **raise pistol** lower the pistol as in executing **inspection pistol** and release the magazine catch; pass the pistol into the left hand, back down, and with the right hand remove the empty magazine and insert a loaded one; pass the pistol into the right hand; draw back the slide and release it to insert a cartridge into the chamber; engage the safety lock and resume **raise pistol**.

If it be desired to insert a loaded magazine but not to load the pistol, the command is **INSERT MAGAZINE**. Executed as prescribed for **load** except that slide is not drawn back.

The recruits are first taught the motions of loading and firing without using cartridges. Loading and pointing practice should be given mounted, at all gaits.

No cartridges will be used, except when indicated in the first command, thus: 1. With ball cartridges, 2. **LOAD**.

130. **UNLOAD.**

Executed as in **load**. The magazine is slightly disengaged and the slide drawn back in order to eject the cartridge from the chamber; the magazine again engaged, and **raise pistol** resumed.

131. **WITHDRAW MAGAZINE.**

Executed as in **load**, except that no magazine is inserted, and the slide is not drawn back.

132. Before dismissing the squad, pistols will be unloaded and magazines withdrawn, in order to prevent loaded or partially loaded magazines being left in the pistol.

Firings.

133. Being at **raise pistol**:

1. At (*such object*), 2. **FIRE**.

At the first command, push down the safety lock, or cock the pistol and direct the eyes toward the object, turning the head and shoulders in that direction.

At the command **fire**, thrust and point the pistol at the object, arm nearly or quite extended, keeping the eyes on the object, and fire; resume the **raise pistol**.

To fire again at the same object: 1. **Squad**, 2. **FIRE**.

134. The pistol being in the holster:

1. **At** (*such object*), 2. **FIRE**.

At the first command, direct the eyes and turn the head and shoulders toward the object.

At the command **fire**, quickly draw the pistol from the holster, point it at the object, push down the safety lock, and fire.

135. An almost imperceptible pause may be allowed between the thrusting and firing in which to correctly point the pistol. Deliberate aiming, however, should not be encouraged. After firing without cartridges, pause an instant to see if the pistol is correctly pointed, to get the personal error.

The instructor must take into account individual peculiarities in order to secure the best results in firing; in such cases departure from the text is permissible.

When mounted, lean slightly forward, bearing on the stirrups; in firing to the front, lean well to the right and slightly forward, to avoid burning or frightening the horse.

To fire at will.

136. 1. **Fire at Will**, 2. **At** (*such object*), 3. **COMMENCE FIRING**, 4. **CEASE FIRING**.

The trooper fires as rapidly as is consistent with careful pointing at each shot.

At the command **cease firing**, the firing will stop, and the men resume the **raise pistol**.

137. Firing practice will be conducted on the principles explained in the Small-Arms Firing Manual.

MANUAL OF THE SABER.

138. For this instruction, dismounted, the saber in the scabbard is carried in the left hand.

In the position of attention the saber will be held upright by the side, guard to the front, the shoe of the scabbard resting on the ground close to the left foot and just in front of the heel. The left arm will be extended, the fingers and thumb grasping the scabbard, back of the hand outward.

In the necessary movements on foot with the saber in hand the saber is carried with the hilt to the front and higher than the shoe of the scabbard. A hook is provided on the belt on which the saber may be carried when the left hand is otherwise occupied, as when carrying equipments.

Officers, dismounted, may carry the saber in the hollow of the left arm, elbow bent, forearm horizontal, guard of the saber to the front, blade vertical.

139. The instructor will impress upon the recruit from the first that he is provided with a saber for the sole purpose of enabling him to kill with it in war, when he will invariably use it mounted, and that instruction on foot is little more than a necessary preliminary to the training which he will receive later on in mounted fighting.

140. If the squad is in ranks the instructor causes the ranks to be opened and intervals to be taken before drawing saber.

141. 1. Draw, 2. SABER.

At the command **draw**, grasp the scabbard with the left hand about 4 inches from the mouth, place the left hand against the thigh, and carry the hilt to the front; turn the head slightly to the left without deranging the position, and glance at the saber knot; engage the right wrist in the saber knot and give it two turns inward to secure it; grasp the hilt with the right hand and draw the saber about 6 inches from the scabbard, and look to the front.

At the command **saber**, draw the saber quickly, raising the arm to the front and upward to its full length, saber in prolongation of the arm. Make a short pause with the saber raised, then bring it down with the blade against the hollow of the right shoulder, guard to the front, right hand at the hip, the third and fourth fingers on the back of the grip and the elbow back.

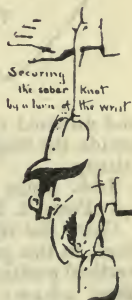
The left hand holds the scabbard as at attention.

This is the position of carry saber dismounted.

142. 1. Return, 2. SABER.

At the command **return**, grasp the scabbard as in **draw saber** and carry the opening to the front. Carry the saber to the front with arm half extended until the thumb is about 6 inches in front of the chin, the blade vertical, guard to the left, the thumb extended along the side of the grip, the little finger joined with the others.

At the command **saber**, move the wrist to opposite the left shoulder, lower the blade and pass it across and along the left arm, point to the rear. Turn the head to the left, fixing the eyes upon



the opening of the scabbard; raise the right hand and insert the blade in the scabbard and push it home. Disengage the wrist from the saber knot and resume the position of attention.

143. Being at the position of **carry saber**.

1. **Present**, 2. **SABER**.

Without changing the position of the left hand, execute at the command **saber** what is prescribed in paragraph 142 at the command **return**, except that the grip is held in the full grasp. The saber is said to be held in the full grasp when all four fingers grasp the grip, the thumb extending along the back in the groove, the fingers pressing the back of the grip against the heel of the hand.

Officers at the command 1. **Present**, execute **present saber** as described above; at the command 2. **SABER**, lower the saber until the point is 12 inches from the ground

and directed to the front, guard to the left, right arm straight, hand beside the thigh. *Mounted* the point is lowered to the level of the stirrup.

144. Being at the **carry saber**.

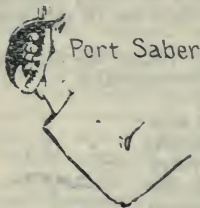
1. **Port**, 2. **SABER**.

Carry the right foot about 24 inches to the right, bring the left hand to the position of the bridle hand and raise the saber to a vertical position, guard to the front, grip held in the full grasp, right hand about 12 inches in front of the shoulder.

To resume the carry: 1. **Carry**, 2. **SABER**.

145. Being at **carry saber**, or in any position: **GUARD**.

Carry the right foot about 24 inches to the right and bend the knees to simulate the position mounted. Incline the body to the front from the waist (not the hips). Let the blade fall to the front to a position nearly horizontal, elbow well away from the body, forearm and saber forming one



straight line, guard to the right, point at the height of the adversary's breast, the left hand in the position of the bridle hand.

146. Being at the carry saber.

1. Inspection, 2. SABER.

Carry the right hand upward, arm half extended until the thumb is at the height of the chin, grip held in the full grasp, blade vertical, guard to the left. Make a slight pause, then loosen the grasp on the grip and turn the saber with the guard to the left. Again make a slight pause, then resume the first position and return to the carry.

147. Saber exercise is conducted and instruction given as prescribed in the "Saber Exercise."

SCHOOL OF THE TROOPER, MOUNTED.

148. The object of this school is to train the trooper in horsemanship and in the ready use of his arms while mounted.

The instructor must first develop the confidence of the recruit, supple him, and give him a proper seat. Progress should be suited to his capacity and exempt him as far as practicable from falls or other accidents. This will be followed by instruction in the use of the aids and the means employed to train the horse to obey them.

When the recruit has acquired confidence in his ability to ride and control his horse he will be instructed in the use of arms mounted.

Instruction is given individually; every new movement is made the object of a particular lesson given successively to each trooper.

During the exercise the instructor avoids general remarks, and in the correction of faults he addresses by name those committing them.

He passes frequently from one trooper to another, repeating advice and endeavoring to impress upon them the principles embodied in the regulations, without endeavoring to use the language of the text.

The instructor has no fixed position. He may be on foot or mounted. For the first lessons it is advantageous to remain on foot so as to better explain movements and correct faults.

He should always maintain an attitude and bearing that will serve as an example to the troopers under his charge.

Steady, well trained horses are selected for the first lessons. The troopers exchange horses from time to time during the lesson on indication from the instructor.

There should be frequent rests, especially with recruits. The time may be used profitably in questioning the troopers respecting the instruction they have received.

149. In all exercises the instructor varies the gait so as not to weary the troopers or the horses. The mounted instruction is con-

ducted without hurry. The mounted suppling exercises are practiced during the entire period of instruction.

The exercise begins and ends at a walk.

150. During the exercises the recruits are taught the rules for the care of horses (par. 300), until the instructor is satisfied by means of questions that they are thoroughly familiar with them.

THE STANDARD REQUIRED OF MEN AND HORSES.

151. To be a good military horseman each trooper should:

- (a) Have a strong seat.
- (b) Be able to apply correctly the aids by which a horse is controlled.
- (c) Be capable of covering long distances on horseback with the least possible fatigue to his horse.
- (d) Be able to use his horse to the utmost advantage in a mounted fight.
- (e) Be capable of riding across country.
- (f) Under proper directions be able to train an unbroken horse and improve a badly trained horse.
- (g) Have a practical knowledge of the care of horses both in garrison and in the field, understand how to detect and treat the minor ailments to which they are liable, and be a good groom.

All officers, in addition to being good military horsemen and instructors in riding, must be able to train, and direct the training of, remounts.

152. A trained charger or troop horse must be:

- (a) Well balanced and capable of carrying a heavy weight over long distances with minimum loss of condition.
- (b) Handy and quick in obeying the correct aids.
- (c) Steady, both in and out of ranks.
- (d) Capable of being ridden with one hand at any pace either in the company of other horses or alone.
- (e) Active on his legs and a good jumper over all kinds of obstacles.
- (f) Unafraid of entering deep water or of swimming.
- (g) Accustomed to arms.

PREPARATORY EXERCISES.

Stand to horse.

To lead out.

The stirrup.

To mount and dismount.

To take the reins in one hand and to separate them.

Position of the trooper mounted.

Suppling exercises.

To vault into the saddle and to the ground.

Posting.

To rest.

To dismiss the squad.

GENERAL RULES.

153. For the preparatory exercises the horses are saddled and equipped with the snaffle bit only, saddles stripped. Spurs are not worn.

These exercises embrace all that is necessary to give the recruit confidence, to supple him, to give him steadiness in the saddle, and to prepare him to benefit by instruction in the first principles of equitation.

The recruits are disposed on the track behind a leader, or mounted upon well-broken horses held on the longe, or each recruit is accompanied by an old trooper, who holds the horse of the recruit by a strap buckled to the snaffle.

The instructor determines the order in which the various exercises are to be employed, according to the aptitudes and defects of the recruits under his charge. He must keep in mind that these various exercises are for the purpose of teaching the trooper his correct position on horseback at the different gaits, and of preparing him to acquire independence in the use of the aids, instruction in which will be given in subsequent lessons.

These exercises are conducted at first in a riding school or on an inclosed course out of doors.

The troopers lead their horses to the school by hand and return them to the stable in the same manner.

When they have received sufficient instruction they go and return mounted.

In order to inspire confidence in the troopers and to enable them as soon as possible to remain long on horseback without weariness, they should be permitted to use the stirrups in the first

lessons. They are taught to tuck them up (first at a walk and then at the faster gaits) only after they have become accustomed to the movement of the horse.

The instructor mounts the recruits outside the riding school or inclosure as soon as their progress warrants it. Each of the horses may be, at first, held in check by an old trooper as previously indicated.

STAND TO HORSE.

154. Each trooper places himself, facing to the front, on the near side of the horse, eyes on a line with the front of the horse's head, so that he can see along the front, and takes the position of attention, except that the right hand, nails down, grasps the reins, the forefinger separating them, about 6 inches from the bit.

TO LEAD OUT.

155. The troopers standing to horse, to leave the stable or picket line, the instructor commands: **LEAD OUT.**

Each trooper, holding his hand well up and firm, leads his horse, without looking at him, to the place designated by the instructor.

If the horse shows a disposition to rush or to resist being led, the trooper takes the snaffle reins from the horse's neck, seizes the end of the reins in the left hand, and with the right hand holding the reins near the bit leads the horse as before. When leading through a low or narrow doorway, the horse should be quieted by the voice or caresses and not allowed to pass through hurriedly. To prevent the horse from rushing through a narrow doorway the instructor may direct the trooper to face toward the horse, holding one rein in each hand close to the bit, and lead him by stepping backward; after passing the doorway the trooper leads the horse as before.

156. Upon entering the riding school or inclosure the instructor disposes the troopers upon the middle line at intervals of one horse-length, the troopers at **stand to horse** and the horses correctly disposed and perpendicular to the line of troopers.

A horse is correctly disposed when he stands squarely on all four feet, having his head, neck, and body in line.

STIRRUPS.

157. The stirrups are properly adjusted when, the trooper being properly seated and the legs falling naturally, the tread of the stirrup is about one inch and a half above top of the heel of the shoe.

The stirrups should bear only the weight of the leg; about one-third of the foot should be inserted in the stirrup, so that the ball of the foot rests on the tread, the heel lower than the toe.

To cause the flat of the stirrup strap to rest against the leg the toe is inserted in the stirrup with the front branch on the outside.

Placing too much weight on the stirrup disturbs the seat and contracts the leg, hindering its freedom of action.

If the toe is not inserted far enough the trooper risks losing his stirrup; if inserted too far suppleness is diminished.

The heel is carried naturally lower than the toe if the ankle joint is not rigid.

For the extended-gallop, in the charge, for the use of weapons, and for leaping obstacles the foot is inserted fully in the stirrup.

158. The instructor exercises the troopers in casting off and resuming the stirrups, at first at a walk and later at the faster gaits.

He teaches them during the rests while on foot to adjust the stirrups by comparing the length of the strap with that of his arm.

The instructor frequently exercises the troopers in riding without stirrups, especially at the gallop and in leaping obstacles.

TO MOUNT AND DISMOUNT.

159. Being at **stand to horse**, at the command **MOUNT**, face to the right, take a step to the right to be opposite the shoulder of the horse; at the same time seize the end of the reins in the right hand and pull them taut enough to give a gentle, even bearing on the horse's mouth; cross the reins flat on the crest and grasp them with the left hand, which also holds a lock of the mane. Place the left foot in the stirrup, assisted by the right hand if necessary, and bring the left knee against the saddle.

Place the right hand upon the cantle, rise by an effort of the right leg aided by the arms, the left knee bent and pressed against the saddle, the upper part of the body inclined slightly forward to prevent the saddle from turning; bring the right foot by the side of the left. Change the right hand to the pommel, pass the right leg, knee bent, over the croup without touching it, and sit down

lightly in the saddle. Put the right foot in the stirrup, assisted by the right hand, if necessary; take a rein in each hand, the rein coming into the hand under the little finger and passing out over the second joint of the forefinger, the thumbs closed on the reins, the bight of the reins falling to the right. The reins should be so held that the trooper feels lightly the horse's mouth; the forearms horizontal, wrists straight, elbows to the rear but not held against the sides; hands about 9 inches apart, backs outward.

The instructor takes care that the recruit in adjusting the reins provokes no movement and deranges in no manner the position of the horse's head.

The instructor cautions the trooper to avoid touching the horse with the left toe in mounting; this fault begets nearly all the resistance of horses to standing quietly while being mounted.

160. At the command **DISMOUNT**, pass the right rein into the left hand and grasp with this hand a lock of the mane; remove the right foot from the stirrup and place the right hand on the pommel. Rise upon the left stirrup, pass the right leg, knee bent, over the croup without touching the horse and bring the right foot by the side of the left (making a slight pause when the rifle is carried), the left knee against the saddle, the upper part of the body inclined slightly forward. Descend lightly to the ground and take the position of **stand to horse**.

The troopers are also trained to mount and dismount on the off side.

TO TAKE THE REINS IN ONE HAND AND TO SEPARATE THEM.

161. At the command: **IN LEFT HAND TAKE REINS**, place the left hand opposite the middle of the body, pass the right rein into the left hand, separating it from the left rein by the little finger; let the right hand fall by the side.

162. At the command: **IN BOTH HANDS TAKE REINS**, grasp the right rein with the right hand and replace the hands 9 inches apart.

The reins are taken in the right hand and again separated in a similar manner.

163. To adjust the reins the trooper brings the wrists together and grasps with one hand, above and near the opposite thumb, the rein that he desires to shorten.

164. The instructor causes the reins to be dropped and retaken by the commands **DROP REINS** and **RETAKE REINS**.

At the first command the trooper drops the reins behind the pommel and lets the hands fall by the side.

The reins are dropped as an exceptional measure and always with precaution against accident.

POSITION OF THE TROOPER, MOUNTED.

165. The position described below should be considered a standard toward which all troopers should gradually approximate.

The buttocks bearing equally upon the saddle and as far forward as possible.

The thighs turned without constraint upon their flat side, clasping the horse evenly and stretched only by their own weight and that of the lower legs.

The knees bent and flexible.

The lower legs falling naturally, the calves in contact with the horse without pressure; the toes dropping naturally when the trooper is without stirrups.

The back supple and never hollowed.

The upper part of the body easy, free, and erect.

The shoulders thrown back evenly.

The arms free, the elbows falling naturally.

The head erect without stiffness.

Eyes alert and sweeping the horizon.

The reins held as heretofore described.

This position may be modified by the instructor to suit varying conditions and unusual conformations.

166. The body and the lower legs are movable and should be under the control of the trooper, either acting intermittently as aids for guiding the horse or as a means of combatting his resistance, or continuously as a means of binding him to the horse while following his movements.

The thigh, on the other hand, should remain fixed immovably to the saddle except while posting at the trot. This fixity should be obtained, not by the pressure of the knees, but by the clinging of the buttocks, which is secured by the suppleness of the loins and the relaxation of the thighs.

If the buttocks are too far back the trooper is unable to conform to the movements of the horse and carries forward the upper

part of the body. This defect is remedied by sitting well forward in the dip of the saddle.

If the thigh is too nearly horizontal the trooper is doubled up and his power of action diminished; if the thigh is too nearly vertical the trooper is on the crotch and lacks ease.

To sum up: The trooper should take a sitting position with the thighs inclined downward.

The various defects of position are overcome by suitable suppling exercises.

SUPPLING EXERCISES.

167. Before a recruit is allowed to mount a horse he should receive instruction on a dummy horse with a view to—

(a) Strengthening the muscles used in riding.

(b) Giving him the correct seat.

(c) Giving him balance and confidence in his ability to maintain his seat.

(d) Accustoming him to keep the thighs constantly pressed against the horse.

(e) Leading him to acquire independence in the use of the aids.

168. These exercises should be given on the horse after the recruit has acquired a fair degree of confidence in his seat. They serve to supple the loins and assure independence of action for the different parts of the body.

The instructor is especially careful that the movement of one part of the body does not react on any other part; for example, that an exercise of the right arm does not disturb the left arm nor the position of loins or legs.

169. The exercises herein indicated are recommended as the most useful, but they are not the only ones in which the troopers may be exercised.

Instructors may add other suitable exercises for the purpose of varying the work and adding to its interest.

Any movement is proper which engages the trooper's attention and leads him to forget that he is on horseback and thereby brings about relaxation.

The end desired is attained by the frequency and variety of the exercises; the instructor must carefully avoid prolonging a movement to weariness, which inevitably brings on rigidity.

He must likewise avoid any movement that would result in lifting the buttocks from the saddle or in sinking the loins and hollowing the back.

170. To execute the exercises, a movement is announced and the command **COMMENCE** is given. The movement is then continued and repeated until the command **HALT**.

The troopers take the reins in one or both hands, drop and retake them, as necessary, without command.

Flexion of the loins.

171. At the command: **BEND TO THE RIGHT**, the trooper, *without deranging the position of his hands*, executes the movement prescribed at this command in the school of the trooper, dismounted.

At the command: **STROKE YOUR HORSE ON THE RIGHT FLANK**, sit down in the saddle by pushing the buttocks forward, turn the body at the hips, and leaning backward but not to the side, place the right hand as low as possible on the horse's flank.

Rotation of the loins.

172. At the command: **STROKE YOUR HORSE ON THE LEFT HAUNCH WITH THE RIGHT HAND**, turn in the saddle without deranging the seat or the position of the thighs and stroke the horse on the left haunch with the right hand, taking care to avoid opening out the left elbow or pulling on the reins.

Rotation of the arm.

173. With the arm extended describe slowly, and with uniform movement, a circle from below upward and from front to rear, keeping the head erect and high while the arm is descending.

Rotation of the thigh.

174. Remove the knee from the saddle and carry it back, straightening the leg; turn the knee in as much as possible and then replace the thigh flat upon the saddle.

Raising the thighs.

175. Raise the knees only so much as is necessary to detach the thighs and lower legs from the saddle, and incline the upper part of the body slightly backward. If the trooper is sitting too far back in the saddle the instructor directs him to draw himself forward by grasping the pommel.

This position compels the trooper to supple his body in order to keep his seat.

When his equilibrium is well established, the trooper gently replaces his thighs upon the saddle, being careful to keep his loins in the same position as during the movement.

This exercise fixes the loins in place, and puts them in proper condition to maintain the balanced seat. It is executed only at a walk or at a slow trot.

Flexion of the leg.

176. Bend the leg slowly without deranging the position of the knee or that of the body.

Flexion of the ankle.

177. Trace with the designated foot, by a slow and uniform movement, a circle from below upward and from outward inwardly without disturbing the position of the leg.

SUPPLING EXERCISES WITH THE HORSE IN MOTION.

178. The exercises which have been taught at the halt are repeated at the different gaits, except as indicated.

To put the squad in march the instructor designates a trooper to act as leader and causes him to take the track; he then causes the recruits to take their places in column of files behind the leader.

The instructor limits his explanations to the essential principles for putting the horse in motion and stopping him.

The troopers are restricted to letting their horses follow those in front.

179. At first the pace of the trot should be moderate. It may be increased to normal when the troopers have acquired sufficient steadiness of seat to maintain a correct position at that gait.

180. As soon as the troopers have acquired a fair security of seat at the trot and have grown accustomed to a fast gait, the instructor begins to train them at the gallop. The first lessons are given on a large circle so that the horses will have less tendency to pull. The troopers retain their stirrups until they have gained confidence. The instructor causes them to abandon the stirrups when he believes that sufficient progress has been made.

The gallop should be employed very early in the instruction; it is the most favorable gait for suppling the loins.

181. As soon as the instructor causes the trooper to take the reins, he teaches him to keep touch with the mouth of the horse, while leaving the horse the free use of his neck, by following its movements with his hands.

The cadence at the increased gaits is easy to follow with the reins lightly held. In a short time the man follows instinctively the movement of the neck.

Constant effort should be made to overcome stiffness of the arms and shoulders, which is the usual cause of a heavy hand.

TO VAULT INTO THE SADDLE AND TO THE GROUND.

182. At the command: **VAULT INTO THE SADDLE**, face to the right, let go the reins with the right hand, seize the left rein with the left hand, nails down, take a step to the right so as to be opposite the horse's shoulder; grasp the reins and a lock of the mane as directed for mounting with stirrups; place the right hand upon the pommel; spring upward and forward, bearing the weight upon the wrists; remain a moment in this position, then throw the right leg, knee bent, over the croup without touching it and sit down lightly in the saddle. Take a rein in each hand.

TO VAULT TO THE GROUND.

183. At the command: **VAULT TO THE GROUND**, pass the crossed reins into the left hand, as has been explained for mounting with stirrups, grasp a lock of the mane with the left hand and place the right hand on the pommel. Rise upon the wrists; pass the right leg, bent, over the croup without touching it, carry it to the side of the left; remain a moment in this position and come lightly to the ground, the heels joined, the knees bent. Take the position of stand to horse.

184. To vault to the ground and into the saddle without pause the instructor commands: **VAULT TO THE GROUND AND INTO THE SADDLE.**

The troopers are frequently exercised in vaulting into the saddle and to the ground, and to the ground and into the saddle from both sides.

During the early lessons these movements are to be executed only at the halt.

When the instruction is well advanced the recruits will be trained to vault into the saddle and to the ground while the horse is in motion. During the exercises at the trot and gallop the trooper when dismounted keeps pace with the horse at the shoulder, by means of the *galloping step*, which he executes (keeping one hand on the withers) by a succession of leaps, rising and alighting with the rise and fall of the forehead of the horse, keeping the left or right foot in advance, according as he is on the left or right side of the horse, and supporting his weight on the balls of the feet. Frequent short rests should be given in order not to strain or unduly fatigue men who are not accustomed to the exercises.

The vault into the saddle while marching is executed as prescribed from the halt except that the trooper is at the galloping step; that he springs forward as he rises, and that as he drops into his seat he catches against the flank with his leg to avoid passing over the horse.

Vaulting to the ground is executed as prescribed from the halt, except that when the legs are joined the trooper presses the left leg against the side of the horse to push his body clear, and alights on the ground faced to the front and takes the galloping step.

POSTING.

185. Posting is habitually employed when the troopers have stirrups and understand their use.

It is executed as follows: The horse moving at a trot, the trooper inclines the upper part of his body forward, then supporting himself on the stirrups while maintaining the clinging of his knees, he rises under the impulsion of the horse, maintains his position detached from the saddle while the succeeding impulse is produced, again sits down in the saddle, and continues in this way, always avoiding every other impulse.

At the beginning the mechanism of posting is made easier to the trooper by causing him to stroke the horse's neck or to grasp a lock of the mane with either hand, thus determining the forward inclination of the body.

Its proper execution requires that the seat shall be raised moderately, that contact with the saddle shall be resumed gently and without shock, that the full support of the stirrup is obtained, while keeping the lower leg steady, that the ankle joint shall be supple, and that the heel shall be kept lower than the toe.

TO REST.

186. Being at **stand to horse**, the command **rest** is executed as in the school of the trooper, dismounted, except that the troopers hold the reins and keep their horses in place.

Being mounted, at the halt, at the command: **REST**, or being in march, at the command: **ROUTE ORDER**, the men are permitted to turn their heads, to talk, and to make slight changes of position, but not to lounge on their horses.

Being at **stand to horse**, the command at **ease** is executed as in the school of the trooper, dismounted.

Being mounted, at the command: **AT EASE**, the men are permitted to turn their heads or to make slight changes of position, but preserve silence.

To resume the attention: **ATTENTION**.

Each trooper if dismounted takes the position of stand to horse; if mounted, he takes the position of the trooper mounted.

TO DISMISS.

187. The troopers being dismounted, in line: 1. By the right (left, or right and left), 2. **FALL OUT**.

The trooper on the right leads his horse 1 yard to the front and then directly to the stable or picket line. Each of the other troopers executes in succession the same movement, so as to follow the horse next on the right, at a distance of 1 yard.

Being in column of files, half-squads, or squads, at the command: **FALL OUT**, the leading trooper or the trooper on the right of each unit leads out as prescribed and is followed by the other troopers in turn. The troopers remove, clean, and put the equipments in place, and care for and secure their horses under the direction of the instructor.

The instructor, having satisfied himself by inspection that the horses and equipments are properly cared for, and that the precautions required on their return from exercise have been observed, orders the men to fall in, marches them to the squadron parade, and dismisses them as prescribed in the school of the trooper, dismounted.

188. **STAND TO HEEL**: Each man stands at attention, 1 yard in rear of and facing his heel post. At the picket line he stands at attention, 1 yard in rear of and facing his horse.

WORK ON THE SNAFFLE.

The legs and reins.

The walk.

To gather the horse.

To move forward and to halt.

To turn to the right or left.

To march to the right or left.

Circling.

The Trot.

The Gallop.

Change of gaits.

The About.

Change of hand.

Circling individually.

Increasing and decreasing the gait.

To back and halt.

To leave the ranks.

Jumping obstacles.

Exercises on varied ground.

GENERAL PRINCIPLES.

189. When the troopers have become familiar with the movements of the horse at each gait and have begun to find and keep a seat in the saddle, the instructor advances them to work on the snaffle for the purpose of teaching them the use of the aids, increasing their confidence and suppleness, and confirming them in their seats.

The exercises indicated for work on the snaffle depend for their effect upon very simple actions, the only ones the recruits need be taught.

It is important that in these exercises the recruits ride only docile and well-trained horses.

The instructor returns frequently to the suppling exercises, and causes each trooper to execute during rests the movements that he has indicated to him as especially adapted to correct his faults of position.

The horses are equipped with the snaffle bit and bare saddles and the troopers are without spurs at first.

The exercises are conducted in the riding school or outside in a rectangle, the corners of which are marked by elevated and con-

spicuous objects. These rectangles are of sufficient dimensions to enable the troopers to exercise with freedom while remaining under the eye of the instructor, and within reach of his voice. The instructor changes the ground as soon as the tracks are worn to the extent that the horses follow them mechanically. He avoids placing his rectangle parallel to adjacent rectangles, roads, paths, or fences, so that, from the first, the trooper is compelled to direct his horse.

190. Work on the snaffle permits much practice *at will* (individual exercises) in which the troopers are absolutely independent of each other, the only obligation being to maintain the gait and to march to the proper hand when on the track. The rectangle serves only to indicate directions; each trooper practices as if he were alone without regard to distance or alignment. The movements are executed anywhere within the rectangle.

The commands do not involve immediate compliance. The troopers conform to them when their place on the track and the state of preparation of their horses put them in proper position to execute steadily the movement directed. Each should choose his ground so as to avoid interfering with his neighbors.

When troopers meet each keeps to the right.

191. To reunite the troopers in the riding squad the instructor commands: **CLOSE ON** (such) **TROOPER**. The designated trooper takes the track and continues at the gait at which he was riding, or at that ordered. The others move by the shortest line and place themselves on the track in single file at a distance of 4 feet from head to croup and move at the gait of the leading trooper.

192. To make an explanation or to give instruction to all the troopers at the same time the instructor commands: **COME TO ME**. The troopers move at the gait at which they were riding or at that designated and by the shortest line so as to group themselves about the instructor.

193. The troopers being grouped about the instructor, or exercising at will, are placed on the track by the command: **TAKE THE TRACK TO THE RIGHT**.

194. The troopers are usually marched to and from the riding school in column of half-squads or squads. The instructor avails himself of the opportunity to instruct them in the movements indicated in the school of the platoon.

THE LEGS AND REINS.

195. The means at the disposal of the trooper for controlling the movements and gaits of the horse are called the *aids*. The most essential are the legs and reins.

196. The legs serve to urge the horse forward, to increase his pace or gait, and to engage the hindquarters or move them laterally. The legs act by the pressure of the calves. If pressure alone is insufficient the trooper increases the action by blows with his calves.

The spur is used when necessary to add to the power of the leg action. It is essential to obtain from the horse perfect obedience to the action of the legs. He should respond to the simultaneous action of both legs by engaging his hindquarters and moving forward; to the predominant action of one leg by moving his haunches to the opposite side. The action of the leg should cease as soon as obedience is obtained.

197. The reins serve to prepare the horse to move, to slacken or increase his gait, or to change direction.

A slight bearing of the bit on the mouth of the horse is called *contact*; this should be constant.

The reins are held in the full hand, the thumb pressing them lightly upon the second joint of the forefinger. By means of closing and relaxing the fingers and flexing the wrist, arm, and shoulder, the trooper, while maintaining contact and keeping the reins taut, follows easily the movements of the head of the horse without anticipating or interfering with these movements. The hand is then said to be *passive*. It is kept so as long as the trooper is not required to change the gait or direction.

198. In gathering the horse or in increasing or diminishing the gait, the trooper closes his fingers upon the reins without raising the hands and exercises an action from front to rear.

This action should not be continuous; the trooper acts by alternately contracting and relaxing the fingers, the hands remaining low and preserving contact in the intervals between the actions. This is known as the effect of the *direct rein*.

199. The action of the hand in changing direction operates in two ways:

First. When the trooper opens the right rein, the head and neck are drawn toward the right and the horse turns his head to that side. This use of the rein is known as the *open rein*.

The hand should be carried freely to the right, the wrist remaining in prolongation of the forearm, without drawing the rein to the rear.

Second. When the trooper bears the left rein against the neck, the head may be bent to the left, but the neck is pressed to the right and the horse turns in that direction. This is known as the action of the *bearing rein*.

This is the normal use of the reins in changing direction, since the trooper generally has but one hand available for directing his horse.

The bearing rein should act without traction from front to rear and intermittently like the direct rein.

200. All action of the reins should diminish in intensity when obedience to it begins, and cease entirely as soon as the desired result is secured.

201. The instructor, in teaching troopers to avail themselves of their legs and reins, is governed by the preceding considerations, and from the first watches vigilantly the action of the aids.

The hand should always be kept low. The most thoughtful care should be exercised in the combined application of the aids, so that they may not be opposed to each other in their action; that is, one favoring the intended movement, the other opposing it.

During work on the snaffle the troopers are trained in riding with one hand.

THE WALK.

202. The walk is a gait in which the feet are lifted in succession and put down in the order of their lifting. If the right front foot begins the gait the other feet are lifted in the following order: Left rear, left front, right rear.

The walk should be free. Its speed is about 117 yards per minute.

TO GATHER THE HORSE.

203. Before the horse is required to execute any movement he should be given a preparatory signal. It makes no difference what the movement is to be, the signal is always the same. Its object is to attract his attention and to prepare him for a movement. *This is called gathering the horse.*

Having a light pressure of the bit against the horse's mouth and a light feel of the lower leg against the horse's side, in order to gather him, increase the pressure of the lower leg against the side,

heels well shoved down, and slightly increase the pressure of the bit against the bars by squeezing the fingers on the reins. Increase these two pressures until the elastic movement of the horse under the rider indicates that he has observed the signal.

If, when at a halt, the horse backs, or when marching decreases the gait, the fingers have been contracted too much. If, when at a halt, the horse moves forward, or when marching he increases the pace or gait, the impulse given with the legs has not been met by the fingers.

Each force should exactly balance the other, and the horse, held between the two, should seemingly grow into an elastic body under the rider.

TO MOVE FORWARD AND TO HALT.

204. Being at a halt, at the command: **Forward**, the trooper gathers his horse. At the command: **MARCH**, he closes his legs, more or less vigorously according to the sensitiveness of the horse, until the horse moves forward at the walk, the hand remaining passive.

205. Being at the walk, at the command: **HALT**, sit down in the saddle and gather the horse; then increase the pressure of the legs and carry back the weight of the body by curving the back outward and act by the *direct rein* until the horse stops.

As soon as the horse slackens the gait ever so little, relax slightly the pressure of the fingers and legs to reward him for his obedience. Then reapply and again relax until the horse has completed the movement desired.

The men must be impressed with the fact that they increase the pressure of the legs in order to cause the horse to bring his hind feet up under him to act as brakes in stopping himself. Also that they must carry the weight of the body to the rear to help hold these brakes in place, and that the horse, when the rider closes his legs, steadies him with the reins, and carries his weight to the rear, decreases the gait; while, if the rider closes his legs and slightly carries his weight forward, he increases the gait.

Normally all the tension that is necessary in decreasing the gait is obtained by contracting the fingers on the reins as the body moves to the rear and the hands maintain their relative position to it. If this is not sufficient, turning the wrists will give additional pressure. The elbows should never be carried toward the rear. *In decreasing the gait a steady pull against the mouth must be particularly avoided.*

BY THE RIGHT FLANK.

206. 1. By the Right Flank, 2. MARCH. Gather the horse; carry both hands to the right until the horse has turned through an arc of 90° and then replace the hands and move straight in the new direction. During the movement the legs maintain impulsion and hold the horse's body so that it follows the curve on which he is turning—that is, if the horse carries his haunches to the inside of this curve, the action of the inside leg should predominate; if he carries his haunches to the outside of the curve, then the action of the outside leg should predominate.

When the trooper holds the reins in both hands he makes use simultaneously of the *open rein* and the *bearing rein*. With the reins in one hand he makes use of the *bearing rein* only.

The action of the reins in turning is governed by the principles explained in paragraph 199. The trooper carries the hands in the direction toward which he wishes to turn and displaces them only to the extent necessary.

207. The *oblique* represents a half turn to the right or left.

TO MARCH TO THE RIGHT HAND.

208. The trooper is said to march to the right or left hand according to whether he has his right or left side toward the interior of the riding school.

At the command: **MARCH TO THE RIGHT HAND**, the trooper directs his horse straight toward the track, and arriving there turns toward the side indicated.

The troopers are distributed over the whole circumference of the track. They endeavor to keep their horses collected and moving straight to the front, and to preserve a free and even gait.

In order to instruct in marching upon fixed points, distinctive marks are placed on the walls of the riding hall or outside the rectangle to serve as points of direction.

The instructor observes that the troopers maintain the gait ordered while turning at the corners and that they approach the corners closely at the walk and trot; he permits a larger radius at the gallop.

209. As soon as the troopers understand the principles of controlling their horses the instructor frequently causes them to *exercise at will* in the interior of the riding hall or rectangle; the troop-

ers ride at the gait ordered, remaining inside the track and executing the exercises on their own initiative.

210. The instructor also exercises the troopers in riding their horses at a designated gait upon a distant object. This exercise is begun as soon as possible and is continued during the whole course of instruction and combined progressively with the jumping of obstacles and the use of arms.

CIRCLING.

211. The troopers being on the track, at the command: **IN CIRCLE**, the leader, followed by the other troopers, rides on a circle between the two tracks.

The trooper takes care to incline his body inward in the same degree as the body of the horse, without advancing or drawing to the rear his outside shoulder.

At the command: **TAKE THE TRACK**, the leader takes the track to the hand toward which he is marching and is followed by the other troopers.

THE TROT.

212. The trot is a gait in which the horse springs from one diagonally disposed pair of feet to the other; between the beats all the feet are in the air. The rate of the maneuvering trot is 8 miles per hour or 235 yards per minute. For purposes of individual instruction the rate may be reduced to 6 or $6\frac{1}{2}$ miles per hour by the command: **SLOW TROT**. At the command: **TROT**, the rate of 8 miles per hour is resumed.

The trot alternating with the walk is the gait best adapted for long road marches.

When trotting without stirrups the trooper endeavors to reduce the shock by suppling his back.

THE GALLOP.

213. The gallop is the most rapid of the gaits. It must not be used unnecessarily over long distances, particularly on hard roads and when the saddle is packed. However, when the rapidity of the regulation trot is not sufficient, the trooper out of ranks should take the gallop in preference to increasing the speed of the trot.

214. The varieties of the gallop are:

The *maneuvering gallop*, which is at the rate of 12 miles per hour, or 352 yards per minute.

The *extended gallop*, which is at the rate of 16 miles per hour, or 469 yards per minute.

The *school gallop*, which is at the rate of about 8 miles per hour.

The horse is said to gallop on the right foot when the right front and right hind foot are more advanced than the corresponding left feet.

When the feet are advanced in the inverse order the horse is said to gallop on the left foot.

The gallop is marked by three beats and a period of suspension.

If the horse be galloping on the right foot, the first beat is marked by the left hind foot, the second by the nearly simultaneous placing of the right hind and left fore feet, and the third by the placing of the right fore foot.

In galloping on the left foot the beats are, right hind, left hind, and right fore, left fore.

A horse gallops *true* when he gallops on the right foot in turning to the right and on the left foot in turning to the left.

He gallops *false* when he gallops on the left foot in turning to the right, or conversely.

A horse is *disunited* when he gallops lead right with his fore feet and lead left with his hind feet or conversely.

215. The gallop should be begun on the circle because the horses thus start off more calmly and the trooper is enabled to regulate the pace by describing a circle of greater or less radius.

As soon as the horse breaks into the gallop the trooper moves in cadence with his horse. The back and legs unite in the rhythm of the gait, the hands accompany gently and without exaggeration the movements of the head and neck.

During the gallop the command *at ease* is frequently given. The troopers execute the suppling exercises which have been indicated as necessary in each case; they abandon themselves completely to the motion of the horse and thus acquire ease and flexibility. Prolonged periods at the gallop on calm and free-moving horses are most favorable for easily obtaining this result.

CHANGES OF GAIT.

216. To pass from the halt or the walk to the trot or the gallop, the means prescribed for passing from the halt to the walk are employed and continued until the desired gait is taken.

To pass from a higher to a lower gait, or to halt, the means prescribed for passing from the walk to the halt are employed and continued until the desired gait is taken or the horse has stopped.

The commands are:

1. Trot, 2. **MARCH**; 1. Gallop, 2. **MARCH**; 1. Walk, 2. **MARCH**; and **HALT**.

THE ABOUT.

217. At the command: 1. Troopers right about, 2. **MARCH**, each trooper turns his horse until he finds himself facing in the opposite direction and moves to his new front.

TO CHANGE HANDS.

218. At the command: **CHANGE HANDS**, each trooper after having passed the corner and marched a horse-length on the long side directs himself toward the diagonal corner so as to take the track to the opposite hand and at about two horse-lengths from the corner. Troopers pass those going in an opposite direction by keeping to the right.

CIRCLING INDIVIDUALLY.

219. At the command: **TROOPERS CIRCLE TO THE RIGHT**, each trooper describes, in accordance with the principles explained in par. 206, a complete circle tangent to the track, and with a radius less than half the length of the short side, and retakes the track at the point where he quitted it.

The trooper moves his horse on the circle by the means prescribed for moving by the flank.

INCREASING AND DECREASING THE GAIT.

220. To increase or decrease the pace or gait the trooper employs the means prescribed for passing from the halt to the walk or from the walk to the halt to the extent necessary to obtain the desired result.

The horse in increasing the pace at the walk increases the amplitude of the movement of his head and neck to the same degree as he increases the length of his step; he accelerates the movement of the head as he increases the cadence of his step.

The trooper aids these movements by yielding the hand and giving the horse greater freedom of movement. He maintains contact with the bit so that he can exercise a gradual restraining influence with the direct rein when he feels the horse is about to spring into the trot.

To decrease the pace at a walk the trooper makes use of the direct rein and legs as in coming to the halt. The step is shortened and the cadence decreased.

To increase or decrease the pace at the trot the same means are used. The exercises in increasing and decreasing the gait afford excellent practice for the trooper in the use of the aids and good training for the horse in obeying them, but the trooper out of ranks should use only the regulation gaits.

The instructor may cause the pace of the gallop to be increased or decreased in the riding school but the maneuvering gallop and the extended gallop only should be used in work on long lines.

Changes of pace are executed at the cautions: **SLOW WALK; SLOW TROT; SLOW GALLOP**, and **WALK OUT; TROT OUT; EXTENDED GALLOP**. The normal pace is taken at the commands: **WALK, TROT, GALLOP**.

TO BACK AND HALT.

221. 1. Backward, 2. MARCH. At the first command gather the horse; at the second command use the direct rein until the horse commences to back, then relax the fingers and continue to use the direct rein intermittently to cause the horse to continue to back and to prevent him from rearing.

At the command: **HALT**, cease the action of the hands.

The trooper carefully avoids raising the horse's head. An elevated position of the head, by constraining the muscles of the loins, renders the backward movement much more difficult for the horse.

If the horse throws his haunches to one side, the trooper increases the action of the rein on that side by opening it widely so as to straighten the horse by *opposing the shoulders* to the haunches. The action of the open rein may be aided or even replaced by that of the bearing rein.

If the horse refuses to back he should be made to take one or two steps forward to flex the muscles of the hindquarters and advantage then be taken of this flexed condition to cause him to back.

222. The training of the trooper in the use of the aids is effected partly by changes of gait, increase and decrease of pace, and partly by the exercises herein described. When the troopers have learned to use the aids correctly the instructor causes them to execute changes of direction combined with changes of gait.

TO LEAVE THE RANKS.

223. The instructor places the troopers in single rank near one end of the riding school. The rank is formed by the command: **FORM RANK.** The troopers move by the shortest line, at the walk, or at the gait ordered, and form in single rank in rear of the instructor.

The instructor then causes them to leave the rank individually by calling them by name.

The designated trooper, avoiding abrupt means, rides quietly to the front and moves forward on a line perpendicular to the front of the squad. He takes the track on reaching it, to the hand designated, or halts at a designated spot.

This movement can be executed while the squad is marching at any gait. When the squad is halted the trooper always leaves the rank at the walk, the faster gait, if one is taken, not being begun until the horse has completely left the rank.

The troopers are also practiced in going through the rank both in the direction of its march and in the opposite direction.

These exercises develop the willingness and docility of the horses and it is well to execute them frequently.

The instructor avoids forming the squad parallel to the sides of the riding school or on well-marked lines. He thus inculcates in the trooper the habit of placing himself in the direction of his chief and then directing his horse independently.

JUMPING.

224. The object of this instruction is to train the trooper to clear obstacles of every nature that he may encounter on varied terrain, so that he may thus remain, under all circumstances when alone in the field, master of his gait and direction.

Jumping is also an excellent means of training the rider; it confirms the seat, increases the pliancy of the hand and arm, strengthens the legs and develops boldness and steadiness.

The work over obstacles should be begun early and continued during the whole course of instruction.

Progress must be regulated prudently and methodically; undue haste is liable to destroy the confidence of the trooper and the willingness of the horse.

This instruction comprises two distinct parts:

The mechanism of jumping.

The conduct of the horse at the obstacle.

225. The troopers are familiarized with the mechanism of jumping by first placing bars on the ground across the track and later low obstacles, and causing the troopers to ride their horses over them without concerning themselves with the conduct of the horses.

The instructor endeavors in this exercise to cause the troopers to maintain their seats and remain in their saddles by the suppleness of their backs, and, above all, to keep their hands low and passive, thus permitting the horse to use his head and neck in keeping his balance.

The horse that, in going over an obstacle, has the free use of his head and neck, jumps willingly, calmly, and without fatigue. The trooper endeavors to keep in unison with his horse whatever changes in rhythm or pace the latter may make.

The jump is made as follows: On arriving near the obstacle grasp the horse with the legs, keeping the body upright, the hands low and passive; at the moment the horse rises bend the upper part of the body forward at the waist, the buttocks remaining in the saddle; as the horse alights sit well down in the saddle without displacing the hands.

226. When the troopers are sufficiently familiar with the mechanism of jumping and with the use of the aids the instructor teaches them to conduct their horses over obstacles by causing them to jump, individually, obstacles placed off the track.

In general, the horse should jump at the gait at which he approaches the obstacle.

On approaching the obstacle the trooper selects the point at which he wishes to jump and conducts his horse straight toward it, the reins separated, the legs close to maintain the forward movement.

If the horse hesitates on approaching the obstacle, anticipate his resistance by stimulating him vigorously with the legs.

If the horse avoids the obstacle, stop him, quiet him, then take him directly in front of the obstacle and urge him with the legs to make him jump.

If the horse stops short in front of the obstacle ride back and put him at it again.

If the horse bolts or gets out of hand pull him up without, however, hampering him when he takes the leap.

All horses lacking in calmness or willingness should be put back in training over small obstacles.

227. Jumping is first practiced with stirrups. When the troopers have become accustomed to it, have confidence in themselves and are sufficiently sure of their hands, they are made to jump frequently without stirrups to assure their seat and prevent their being thrown when deprived of their habitual means of support.

228. Obstacles for jumping are comprised in two classes:

1. Those which require a leap of breadth only, such as ditches, water jumps, etc., and which are designated as broad jumps.

2. Those which require a leap of height, such as hedges, fences, walls, etc., and which are designated as high jumps.

The dimensions of the obstacles are increased in proportion to the progress of the troopers. They should be limited to 8 feet for broad jumps and 3 feet for high jumps.

Artificial obstacles should have a sufficient width of front to prevent the horses from avoiding them easily.

High jumps are as a rule taken at a gallop of moderate pace, and broad jumps at an extended gallop. For broad jumps it is important that the pace should be increased as the obstacle is approached so that the horse shall be at full speed when he makes the leap. *The horse must have free use of his head and forehand during and after the jump.*

229. The troopers are prepared for jumping in formed bodies by jumping first in pairs, then in fours, separated by considerable distances.

The preservation of the distances separating the groups is a means of verifying the training of men and horses in this exercise.

A body of troops jumps obstacles encountered in its march without changing gait or formation, intervals between troopers and distances between ranks being increased as necessary.

EXERCISES ON VARIED GROUND.

230. The exercises on varied ground have for their object the training of the troopers in riding their horses across country, in making them familiar with obstacles which they will encounter in campaign, and in regulating their gait so as to husband the strength of their horses in covering great distances.

This work is begun at an early period of the training; its difficult features, such as jumping obstacles, are graduated to fit the progress of the trooper, the end being to increase his confidence and skill.

The instructor conducts his class across fields, through woods, and in general over the most varied terrain at his disposal.

He may divide the squad into small groups, each under a corporal, who conducts the group and regulates the gait over a route designated by the instructor.

231. The instructor inculcates in the troopers the principles which should govern them when left to their own devices. They are as follows:

On leaving the stable, move at a walk for a short time in order to get the horse's legs under him.

Vary the gaits but do not depart from the regulation pace prescribed for each.

Choose for the rapid gaits nearly level ground. Going up hill rapidly necessitates great effort on the part of the horse, and going down hill at a rapid gait exposes him to injuries from the saddle and equipment, and is hard on his forelegs.

Extend progressively the periods at the faster gaits.

Regulate the periods spent at the intermediate gaits by the degree of rapidity with which the total distance must be covered.

Seek, under all circumstances, soft footing, to save the horse's legs, and keep him, therefore, on the edge of metalled roads rather than in the middle.

Choose hard ground when smooth and level in preference to ground that is heavy or uneven.

Finish at a walk, more or less prolonged as the journey has been more or less long and trying, so that the horse shall always come in with a dry skin and normal respiration.

232. To these general principles, which must be practically demonstrated, the instructor adds such counsel as his experience dictates and such remarks as the nature and state of the terrain may render advisable.

The following rules cover the majority of circumstances that will arise:

To ascend a steep slope, yield the hand as soon as the horse has been given his direction; carry forward the upper part of the body and seize a lock of the mane near the middle of the neck under the reins.

To descend a steep slope, let the reins slip through the hand and give the horse complete liberty of action; lean back, and if necessary grasp the cantle with the right hand.

Troopers should be practiced in crossing a V-shaped ditch, about 18 feet wide and 10 feet deep, so that they go down one side

and up the other. This is a valuable exercise, as no horse will face the opposite bank unless the head is left free.

Long, steep slopes should be ascended slowly and quietly.

All slopes should be descended directly; short, steep slopes should be ascended directly; long slopes may be ascended obliquely if the surface is not slippery.

In difficult ground, the horse should be allowed to take the initiative; his instincts are a more reliable guide than the aids of the trooper.

If marshy ground must be crossed go slowly and avoid following in trace. If the horse goes down and becomes nervous and begins to plunge, dismount and lead.

The trooper must seek every means to spare his horse, above all when carrying the full pack; where possible to pass natural obstacles without jumping this should be done; the heavily loaded horse crosses many obstacles, for example, wide ditches, with greater security and less effort by climbing than by jumping.

When the bottom of the ditch is boggy it will generally be preferable to jump from bank to bank.

In particularly difficult places, the trooper should dismount and lead, the horse following. All horses should be trained in this method of passing obstacles; a little of this training makes it easy to cross considerable obstructions on foot.

WORK ON THE BIT.

Holding and handling the reins.

Use and effect of the bit and snaffle.

Employment of the spur.

Repetition with the bit of the work on the snaffle.

The turn in place.

Work at fixed distances.

Changing the diagonal in posting.

Work on long lines.

233. Work on the bit is the most important element of the instruction in equitation. The instructor causes this work to be taken up as soon as the troopers have acquired a fair seat and a sufficient knowledge of the use of the aids.

234. The trooper at stand to horse and in leading holds both reins as prescribed for the snaffle rein. The bit rein is not removed from the horse's neck in leading.

In mounting and dismounting the trooper manipulates both reins as has been prescribed for the snaffle. After dismounting, before leading to the stable or picket line, he unhooks the curb chain.

HOLDING AND HANDLING THE REINS.

235. Proper handling of the reins being an important element in horsemanship, the instructor exercises the troopers in it both at a halt and at all gaits.

The normal method of holding the reins for military riders is to take both reins in the left hand. The bit reins are separated by the third (ring) finger, the right snaffle rein between the first and second fingers, the left snaffle rein under the little finger, all of the reins passing out of the hand over the second joint of the first finger, upon which the thumb presses them with sufficient force to hold them in place; the bight falls to the right of the horse's neck. The elbow falls naturally, the wrist and hand in line with the forearm, the finger nails toward the body.

Since the trooper in mounted combat needs the right hand for his weapon (sword or pistol) he must be thoroughly trained in riding with the reins in one hand and in riding on the curb bit.

236. The instructor explains to the troopers that they can:

(a) Ride the horse on the bit, relaxing the snaffle reins, which is the normal method in combat;

(b) Ride the horse on the snaffle, relaxing the bit rein, an exceptional method, used with horses that carry the neck arched, or that have especially sensitive mouths;

(c) Ride the horse on both reins, supporting the horse with both snaffle and bit; this is the normal method used at drill and on the march, at rest and in jumping.

237. When the trooper is not called upon to make immediate use of his arms it is usually advantageous to hold the reins in both hands. In this case he can use the right hand for holding either the right snaffle rein, or both right reins.

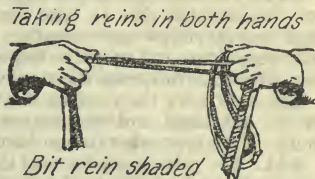
To take the right snaffle rein in the right hand, the trooper seizes that rein in front of the left hand with the right hand, the little finger next to the reins, and holds it as when riding with one rein; he places his right hand on a level with the left hand, the bight of the rein coming out under the thumb.

When the trooper wishes to take both right reins in the right hand he holds them in the full grasp, the reins separated by the little finger, snaffle rein underneath. This method is preferably

employed in riding across country, in jumping over obstacles, in galloping a horse, etc.

When seizing the right rein or reins in the right hand the left hand allows the reins to slip through the fingers but does not let them go; the two reins passing from the left to the right hand thus form a "bridge" across the horse's neck, a useful thing if the horse stumbles or refuses to jump. This method of holding the reins is taken at the command: **IN BOTH HANDS TAKE REINS.**

During the rests and at route order the troopers alternate in taking the reins in the right hand, the left hand, and both hands. They thus avoid becoming fatigued, advancing the shoulder, or, by carrying the reins to one side, giving to the horse a false carriage of the head and neck. The method for holding the reins in the right hand is similar to that for reins in the left hand.



To allow his horse to ease his head and neck at the walk or at the halt the trooper opens his fingers without changing the position of his hand so as to permit complete relaxation.

When the trooper has the sword or pistol in hand he may use the right hand to adjust his reins or to separate them momentarily but he must exercise great care to keep the point of his sword or the muzzle of his pistol elevated to avoid wounding his neighbors. The troopers must be frequently practiced in riding with the reins in one hand.

238. To adjust the reins, seize them with the thumb and first finger of the right hand above the left thumb; slightly open the fingers of the left hand, raise the right hand, feel lightly and evenly the horse's mouth with both reins and close the fingers of the left hand on the reins.

The troopers are exercised frequently in changing from both reins to the snaffle reins and the reverse.

To shorten the reins, seize the rein or reins to be shortened between the thumb and first finger of the right hand above the left thumb. To lengthen the reins, seize the rein or reins to be lengthened between the thumb and forefinger of the right hand below the left hand.

In executing these movements, the hands should be displaced as little as possible.

USE AND EFFECT OF THE BIT AND SNAFFLE.

239. The effects of the bit reins are similar to those of the snaffle, but more pronounced, even when they are produced by lighter action of the hands.

The bit acts on the bars and gains in power from the leverage afforded by the curb chain, while the snaffle acts directly on the angle of the lips.

240. To demonstrate these effects to the troopers, the instructor causes them first to take the snaffle reins alone and execute thus several simple movements. He then causes them to take the bit reins alone and execute the same movements. He points out the difference between the two means of control.

The instructor then causes the trooper to take the bit reins alone in the left hand and terminates this instruction by the employment of the four reins in one hand.

241. The principal effects of the bit reins are produced by carrying the hand forward, to the rear, to the right or to the left.

If the hand is carried forward, the action of the reins decreases until it disappears; this movement of the hand is limited to the amount necessary to avoid opposition to the forward movement of the horse.

If the hand is carried to the rear, the two reins are stretched equally (direct rein); the impression received by the bars of the horse's mouth produces a decrease in pace or gait, or even a movement to the rear.

If the hand is carried to the right, the right rein becomes slack and no longer produces any effect; the left rein becomes taut, and presses the neck to the right; the horse is thus caused to turn to the right (bearing rein).

If the hand is carried to the left, the opposite effect is produced. The effect of the bearing rein produced by one hand may not suffice to cause a change of direction. The trooper should then separate the reins and make use of the open rein.

By using alternately the bit and snaffle, the trooper saves the mouth of a horse that bores, the alternate action permitting the trooper to change from pressure on the bars to pressure on the lips and conversely.

242. In all movements the trooper keeps the arm bent and softens the effect produced by the hand by keeping supple the joints of the fingers, wrist, shoulder, and elbow.

EMPLOYMENT OF THE SPUR.

243. The spur is an aid which augments the effect produced by the leg.

The trooper employs it in rear of and near the girth by touching the horse with it, once or oftener, according to his sensitiveness and degree of submission.

REPETITION WITH THE BIT OF THE WORK ON THE SNAFFLE.

244. All the exercises of the work on the snaffle are repeated in the work on the bit. This repetition is for the purpose of perfecting the troopers in the use of the aids and confirming the correctness and regularity of the various gaits.

The movements are executed as prescribed in the work on the snaffle, always keeping in mind the greater power of the bit as compared to the snaffle.

In the execution of the about the instructor may cause the trooper to regain the track on an oblique line while keeping the horse parallel to the track, by increased pressure of the outer leg.

For example, when the right about has been completed and the trooper starts to oblique to the track he should carry his left leg to the rear to push the hindquarters to the right, so that the horse in moving crosses his forelegs slightly and his body remains parallel to the track. The movement is limited to a few steps. The hand remains passive if the horse does not increase the gait; it acts as a restraint in case he does.

The abouts and individual circlings are executed with radii which are reduced more and more preparatory to the turn in place.

THE TURN IN PLACE.

245. The turn in place consists in making the horse turn on his own ground, displacing the shoulders to one side and the hindquarters to the other.

At the command: **TO THE RIGHT, TURN IN PLACE**, halt, carry the hand to the right and rear to move the shoulders to the right; use the right leg at the same time to move the hindquarters to the left.

The turn in place to the left is made by inverse means.

To preserve the horse's willingness it is essential to move him forward briskly as soon as the turn in place is completed.

246. In order to enable the trooper to grasp the mechanism of the turn in place and to obtain the necessary calmness and regularity, the turn in place is executed slowly at first, but the rapidity indispensable for the employment of this movement in individual mounted combat must be obtained by gradual progression.

WORK AT FIXED DISTANCES.

247. The work in the riding school at fixed distances comprises the movements executed in the individual instruction, but the movements are executed in unison at command and the troopers follow and conform to movements of the leader.

The work therefore requires of the troopers more precision and exactness in the use of the aids and serves to prepare them for work in ranks.

For the instructor it is a check on the results accomplished.

The instructor forms the troopers in one or two squads; when there are two squads, he designates that one of the two leaders upon whom the other will regulate.

The troopers follow the leaders, maintaining a distance of 4 feet from head to croup.

CHANGING THE DIAGONAL IN POSTING.

248. The right fore and left hind foot constitute the right diagonal; the left fore and right hind foot, the left diagonal.

In posting, the trooper is said to post on the right diagonal when after rising he sits down in the saddle at the instant the right fore foot comes to the ground.

It is important to instruct the trooper to post for a time on one diagonal and then change to the other, so that the horse's legs will each perform the same amount of work and the chance of injury from the equipment will be reduced.

To automatically insure that the posting is done as much on one diagonal as on the other the troopers may be required to post on the left diagonal when riding to the left hand on the track, and on the right diagonal when riding to the right.

The instructor occasionally requires each trooper to inform him on which diagonal he is posting.

To teach the trooper to change the diagonal the instructor directs him to diminish the weight borne on the stirrups and to retain his

seat in the saddle for two successive beats of the horse's feet instead of one, and then to rise as before.

The trooper will then find himself posting on the diagonal opposite to the one on which he was posting before.

WORK ON LONG LINES.

249. This work is carried out in a rectangle of large dimensions. The troopers are there exercised at all gaits, but with the movements restricted to changes of direction, pace, or gait.

The end sought is complex: To confirm the horse in moving on a straight line; to increase his willingness in isolating him to a greater extent; to regulate his gaits; to familiarize the trooper with the regulation and extended gallop; to exercise the troopers in squads in single rank, to prepare them for work in the platoon and to accustom them to following a leader; finally to cause the troopers and horses to acquire the calmness indispensable in the faster gaits.

The troopers are dispersed at large distances over the whole of the track. When they are in squads, a trooper in the center is designated to act as center trooper; his comrades regulate on him.

The instructor limits his commands to indicating the gait or the movement to the trooper or squad which is passing in front of him. The others observe and conform.

Advantage is taken of this work to teach the trooper to obey signals and trumpet calls.

250. The angles of the rectangle are marked by elevated objects easily distinguished.

To permit the instructor to control the gaits the dimensions of the rectangle should be 235 by 118 yards. These two distances represent approximately the distances covered by the horse in one minute at the trot and walk, respectively. The sum of a side and end, taking into consideration the distance lost in rounding the corner, represents the distance covered by a horse in one minute at the regulation gallop.

To cover the distance which a horse is required to make in one minute at the extended gallop, one side and two ends are used.

In the work at the gallop the instructor must devote his efforts to securing that calmness and regularity of pace required in prolonged drills or exercises.

When the horses move calmly at the regulation gallop they are exercised in the extended gallop.

251. The troopers are next prepared to participate in the charge by exercising them in galloping at full speed over a distance of 60 to 75 yards. The movement is executed successively by the troopers. Each trooper when his name is called gradually yields the hand sufficiently to give the horse the necessary liberty in extending his neck while maintaining support, increases the gallop to full speed and yells: **Charge.**

In charging the trooper bends the body forward, pushes his feet fully into the stirrups upon which he supports his weight, gives his horse if necessary a touch of the spur, and holds him in the direction indicated.

The exercises are facilitated at first by grouping the troopers by twos.

To pass from the charge to the gallop, employ the means prescribed for decreasing the gait.

In order not to fatigue the horse by repeated charges, or by charges executed on hard ground, the individual charge should be made a part of each of several instruction hours, and should always be executed on a track or piece of ground specially adapted to this work.

252. The work in the large rectangles should be completed by work in *open order*.

In this work the troopers are formed in successive lines of four troopers each, with distances and intervals of three or four yards.

The instructor causes the troopers thus formed to move in all directions and at all gaits, and causes them to execute the movements prescribed in the work on the snaffle and bit with and without arms.

Satisfactory execution of this work requires that each trooper shall keep his place exactly with reference to the others, and that the movements shall be executed with precision and in unison.

The individual instruction on horseback, begun with the recruit, must be kept up during the trooper's entire service.

For the older troopers prolonged work at the trot without stirrups is of great utility. With trained and hardened troopers, capable of withstanding fatigue, it confirms the seat and renders easy the correction of faults of position.

Squadron and platoon commanders must exercise the trained troopers in riding across country or on varied terrain at rapid gaits and thus train them in husbanding the strength of their mounts while using them fully for the end in view; they should perfect them in the use of arms by constant practice on dummies and in

combat exercises, and endeavor above all to make of them fearless horsemen, confident in their ability to defeat the enemy in mounted combat.

The individual worth of each trooper, together with his feeling of invincibility, gives to the organization the confidence and audacity which enables the leader to undertake the most daring enterprises.

USE OF ARMS MOUNTED.

Manual of the Saber.

Manual of the Rifle.

Manual of the Pistol.

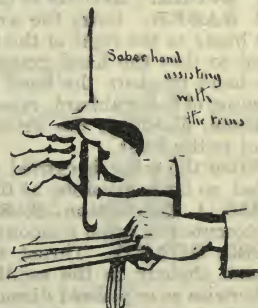
Inspection of arms.

253. The troopers are exercised in the use of arms mounted as soon as they are sufficiently confirmed in their seat and instructed in the use of the aids to avoid interference with their progress in equitation.

The employment of the saber mounted is taught as prescribed in the Saber Exercise; the use of the pistol in firing mounted, as prescribed in the Small-Arms Firing Manual.

MANUAL OF THE SABER, MOUNTED.

254. The saber suspended from the *left* side of the saddle—



1. Draw, 2. SABER. Pass the right hand over the reins and execute with it rapidly what is prescribed for drawing the saber on foot; place the pommel near the hip and resting on top of the

thigh, flat of the blade against the point of the shoulder. This is the position of *carry saber*, mounted.

255. The saber suspended from the *right* side of the saddle—

1. **Draw.** Turn the head to the right without deranging the position of the body and glance toward the hilt, engage the right wrist in the saber knot, pull the hilt forward, seize the grip in the full hand, nails to the right, draw the blade 6 inches from the scabbard, and look to the front.

2. **SABER.** Draw the saber as prescribed on foot and take the position of *carry saber*.

256. The troopers are also exercised in drawing the saber as quickly as possible at the single command: **DRAW SABER.**

To return saber.

257. The scabbard suspended from the *left* side of the saddle—

1. **Return.** Execute as prescribed on foot.

2. **SABER.** Execute as prescribed on foot, supporting the back of the blade against the left forearm until the point is engaged in the scabbard.

This command is given only at a halt or when marching at a walk.

258. The scabbard suspended on the *right*—

1. **Return.** Execute as prescribed on foot.

2. **SABER.** Carry the wrist opposite the right shoulder, lower the blade to the right of the horse's neck, let the grip turn in the hand so that the hand grasps the guard at the pommel, back of the hand up, turn the head to the right and fix the eyes on the opening of the scabbard, raise the hand, insert the blade and push it home, disengage the wrist from the saber knot, and turn the head to the front.

When the saber is carried on the right the return saber is executed, so far as possible, at the halt.

259. 1. **Inspection,** 2. **SABER.** 1. **Present,** 2. **SABER.** Executed as when dismounted.

260. **GUARD.** Thrust the feet home in the stirrups and crouch slightly in the saddle, bending forward from the waist. Otherwise as explained dismounted.

261. In the charge in close order the trooper in the front rank assumes the position indicated in paragraph 251, the body almost



Front Rank
Charging Position in Close Order



Guard -
Charging
as
and



Position
Foragers
in Melee

Rear rank
Charging position
in close order.

in a horizontal line over the horse's neck, the arm fully extended to the front, the saber, in the full grasp, in prolongation of the arm, guard up, finger nails to the right, point at the height of the eye. When difficult ground is encountered the trooper takes the position of guard while passing it.

In charging in double rank those troopers who are in the rear rank or who are directly in rear of others take the position of port saber.

In the *mêlée* the troopers take the position of guard toward the nearest enemy, crouching slightly in the saddle and alive to all possible attacks.

MANUAL OF THE RIFLE, MOUNTED.

262. Before standing to horse the trooper attaches his rifle to his belt by passing the muzzle up through the belt ring and engaging the snap hook of the belt ring into the trigger guard.

Being at stand to horse, upon any preparatory command, except for mounting or securing horses, unsling the rifle from the belt ring and take the position of order arms, removing the snaffle reins from the horse's neck and passing the right arm through them, if necessary.

If a command to secure horses is given, link or couple first, and then unsling the rifle.

To mount, proceed as without the rifle. When seated in the saddle grasp the rifle at the bolt with the left hand, barrel to the front, place the butt of the rifle in the bucket, steadying the latter with the left foot, if necessary, and take the position of the trooper, mounted.

To dismount: At the preparatory command seize the rifle at the bolt with the left hand, give it a quick, forcible pull, lifting the butt from the bucket, and let the rifle hang from the belt.

MANUAL OF THE PISTOL, MOUNTED.

263. Raise pistol, return pistol, and inspection pistol are executed as when dismounted. The pistol, when carried out of the holster mounted is kept at the position of raise pistol.

Load, unload, and withdraw magazine are executed as when dismounted, care being taken in handling the pistol with the left

hand not to release the hold on the reins and to disturb the position of the hand as little as possible.

In manipulating the slide the muzzle is pointed downward and to the left front to avoid injury to man or horse in case of accidental discharge.

INSPECTION OF ARMS, MOUNTED.

264. The troopers being mounted, fully armed, sabers drawn:

1. **Inspection**, 2. **ARMS**.

The inspection begins on the right. As the inspector approaches the rank, the first two troopers execute the first motion of inspection saber; the first trooper, as the inspector comes in front of him, executes the second and third motions of inspection saber; the second trooper, as the inspector comes in front of him, executes the second and third motions of inspection saber, the first trooper at this instant resuming the carry, and the third trooper executing the first motion of inspection saber. The first trooper then returns saber. As the inspector comes in front of the other troopers the movements are executed successively as just explained.

Each trooper, as soon as he has returned saber, comes to the position of inspection pistol.

If the squad is in two ranks, they are opened before the sabers are drawn preparatory to inspection.

The instructor inspects the sabers of both ranks before inspecting the pistols.

In inspecting pistols, as the inspector passes to the next trooper on his left, each trooper returns pistol.

265. To inspect the rifles or to inspect the dress and equipment of the squad more minutely, the instructor dismounts the squad, and without forming ranks commands: 1. **Inspection**, 2. **ARMS**.

The troopers take the snaffle reins off the horse's neck, pass the right arm through the reins, unsling the rifle, and come to the order. The inspection of rifles is then conducted as when dismounted, except that each trooper, as soon as he has been inspected, slings his rifle, places the reins over the horse's neck, and stands to horse.

To inspect the pistols dismounted, the command **inspection pistol** is given. The men attach the rifle to the belt, and with the right arm through the snaffle rein, execute inspection pistol. As the inspector passes each trooper he **returns pistol** and takes the position of **stand to horse**.

ADDITIONAL INSTRUCTION IN EQUITATION FOR NONCOMMISSIONED OFFICERS MOUNTED ON TRAINED HORSES.

THE INSTRUCTOR.

266. The instructor must have a well-defined progressive scheme suited to the needs of the troopers under instruction, the successive steps of which he should be able to explain clearly in simple language. He should be able not only to recognize unerringly the cause of any difficulty the trooper meets, but also to point out the means of remedy, and in case of need, to apply these means readily and skillfully himself. He should never give explanations during fast gaits. He should bear in mind that progress does not come from the mere execution of the movement, but from the way in which it is executed. He should try to introduce some new and unexpected feature into each day's work, in order to hold the trooper's interest.

Every effort should be made to maintain good nature; it is the best aid to suppling. Instructors and pupils must ever bear in mind that the greatest obstacle to good horsemanship is *bad temper* of either rider or mount.

The instructor should let no individual's fault in seat or management of the horse pass without correction, for it is only by incessant criticism of the same errors that a bad habit can be eradicated.

The preparatory work briefly given in these regulations admits of further development to meet unforeseen difficulties that may arise. The extent of such development, while conforming to the spirit of the system, should be left to the instructor's judgment.

THE AIDS.

267. The rider conveys his wishes to the horse mainly through the medium of his hands and legs. As these wishes should be conveyed in the smoothest possible manner, it follows that he should at all times be in direct communication with his mount; he can maintain this communication only by riding with a slight pressure of the bit against the horse's mouth and with a light feel of the calf against the horse's side.

The responsiveness of the horse to the aids depends upon the manner in which they are applied. The application must be intermittent; that is, when an aid is employed to effect a movement, the

action must be relaxed as a reward for obedience the moment the horse yields in the slightest. The aids should be reapplied and released and reapplied and released until the horse has yielded and completed the movement desired. They must be applied gently and firmly with a maximum use of the leg and a minimum use of the bit. Riders can not be too strong in their legs for equitation work and very few of them are sufficiently light and delicate in the use of their hands. Most of the trouble the trooper has in handling his horse can be traced directly to too little use of the legs and too much use of the hands.

Successful results come from the *correct* employment of the aids. First, by their intermittent use as before described. Second, by using them in proper relationship, and not, for example, demanding one thing with the legs and contradicting with the hands. This is a very common fault. It is also a common error for a man to apply one leg to swing the haunches and unconsciously contradict it with his other leg. Third, by using them gently.

THE SEAT.

268. As successful results come from the correct application of the aids, so the successful application of the leg aids depends upon the seat, which may be defined to be the ability of the rider to keep his balance under all circumstances, whatever the reactions of the horse. A good seat is the first essential, because it is the basis of stability and therefore of confidence. Its attainment is aided by the acquirement of the correct "position of the trooper mounted" and by the suppling exercises.

The rider's position is in all probability correct if he has a good, firm hold with the upper leg, his legs and heels are well shoved down, his feet are approximately parallel to the horse's side, his calves have a light feel of the horse's sides at about the rear edge of the girth, and his stirrup straps hang vertically.

The importance of getting the lower legs to the rear as indicated can not be overestimated. They are the logical rudders for the horse, as they control practically all of his body in rear of the forehead. They drive his haunches under him to assist him to start, back, stop, turn, or jump,

A light pressure of the calf must be maintained against the horse's side, for otherwise the rider can not apply his legs with sufficient nicety to bring his horse to a high state of responsiveness. If a horse is too sensitive to the legs, or nervous, and is ridden with legs free

from the sides except when a movement is desired, the animal becomes unsteady, due to lack of support from the legs and to their irregular application.

Many men find trouble in keeping the stirrup straps vertical and the heels lower than the toes. Both difficulties are due to the thighs working up toward the horizontal. This fault is corrected by getting the heels lower than the toes by a movement of the ankle joint, then, still keeping the heel in this position, bending the knees so as to carry the feet to the rear until the stirrup straps are vertical. In very difficult cases the stirrup straps should be tied to the girth so as to hang vertically.

The toes should not be permitted to turn out excessively, else the pressure with the inside of the thigh and knee will be lost. The feet should be kept in to the horse's side and not shoved out.

In order to have a good seat the whole body, especially the ankle joints, must be supple.

TO MOVE FORWARD OR TO INCREASE THE GAIT.

269. Executed as described in the school of the trooper. As soon as the horse begins to move, or to increase the gait, gradually relax the fingers, and when he has attained the gait or pace desired, relax the legs to their normal pressure.

Many horses do not respond promptly. First, because the horse has not been sufficiently gathered to attract his attention. When this is the case, his attention should be further attracted at the command of execution by elevating the hands a little and increasing the pressure of the fingers on the reins, so as to pick up his head slightly at the moment the leg pressure is increased to shove him to the front. Second, instead of shoving the horse against the bit with the legs at the command of execution, the rider frequently shoves his hands to the front and allows the reins to become slack. When the reins are allowed to slacken thus, the horse usually fails to move off promptly, and when he does it is in a sleepy manner. This is one of the most difficult faults to correct, and in the beginning requires constant attention. Third, because lazy horses do not respond readily to calf pressure. With them the rider should open out the legs from the horse's side and bring them back with several smart blows of the calf, or, if necessary, of the heels as well. He should be very careful to relax the fingers as the horse moves to the front. Such horses can gradually be trained to respond readily to calf pressure. Fourth, because the aids are not applied in proper relationship. A few minutes should then be spent in individual

instruction of the men. Fifth, because the horse is not sufficiently trained to appreciate the meaning of the aids; patience and carrying out the foregoing hints will overcome this difficulty.

THE HANDS.

270. As stated under "Aids" the trooper should ride with a light elastic feel of the bit against the horse's mouth. This is called a light hand. It is obtained by keeping all of the muscles of the arm, hands, and fingers elastically relaxed. The hands should be perfectly steady, with no motion of the shoulders or elbows. The reins should be held in the hands with just enough elastic contraction of the fingers and thumbs to keep them from slipping. Such motion as is necessary to follow the slightest movements of the horse's mouth should be made in the finger and wrist joints only.

By careful insistence upon the foregoing the troopers will rapidly acquire light hands; steady shoulders, steady hands, and relaxed fingers should be demanded of them at all times.

A few men in seeking light hands ride with loose reins—"no hand." This should be avoided because, the rider having lost communication with the horse's mouth, the animal is not under instant control.

TO DECREASE THE GAIT.

271. The fingers should be relaxed every second or two. The faster the gait the more care should be given to this intermittent action.

It must be impressed on the troopers that in decreasing the gait a maximum pressure of the legs and a minimum pressure on the mouth must be used. Pain in the mouth always provokes resistance to the bit, and the horse shows this resistance by shoving his nose out and setting his jaws against the hand.

272. The object of the *half-halt* is to diminish the pace of the horse, to improve his bearing and balance during movement, to restore lost balance, or to counteract pulling and hurrying in the gait.

In the half-halts the rider renews pressure with the legs and increases the action of the reins as if to bring the horse to a stop. But, through vigorous action of the rider's legs, the horse's hind legs are kept well under him so that their proper impulse is maintained. In this way the horse is prevented from giving up the

impulse of the hind legs and losing his balance under the indications of the reins. It is effected according to need; if only an improvement in bearing is aimed at, the application of these aids in a minor degree may give satisfactory results.

In increasing the tension on the reins the fingers are closed and the wrist turned from below upward and bent from front to rear, care being taken not to lose contact with the mouth.

TO CHANGE DIRECTION.

273. In changing direction it is difficult to say which leg the rider uses more strongly, as it depends upon the speed, the size of the circle, and the degree of training of the horse. The horse's body should follow approximately the curve on which he is moving. It should be impressed upon the trooper that the legs act first and are the principal aids in turning; that the secret of smooth turning is legs well back and horse well collected; also, that the horse's head must not be pulled around to the inside with the inside rein—a most difficult fault to correct.

BACKING.

274. A few steps without resistance and with the horse under control are better than many without these conditions. Go slowly.

Care should be taken to rein in as a fore foot is to move and to relax only slightly—not sufficiently to allow the horse to stop or the reins to slacken.

The horse should not be forced back when he is rigid and set against the hand. He should be induced to move slightly to the front, or to move the haunches to one side; then advantage is taken of the movement to try again to back him.

THE GALLOP.

275. Take the trot, and gradually increase the pace. Place the left leg well in rear of the girth, the right on the girth, and urge the horse quietly forward with both legs, the left hand lowered a little and the fingers slightly contracted on the reins. With the aids thus applied and with the trot gradually increased the horse should spring into the gallop lead right. When the horse takes the correct lead he should be held at a free gallop, the rider maintaining the aids as described, so as to keep him from a change of lead. Troopers

who fail to obtain the gallop lead right should be made to bring their horses to the trot promptly and start over again.

Troopers must not be allowed to look down to see if the horse is going to take the correct lead, for if they do, they will not apply the aids correctly. After the horse has actually broken into the gallop the rider can glance at the leading shoulder and see if the lead is correct. He should, however, soon get out of this habit, and learn to feel the lead the horse has. If the horse is galloping with the lead right, it is easy to keep the left leg against the side and there is a strong tendency for the right leg to fly out to the front. Also, the rider will feel a throw in the saddle from left to right.

Care should be taken in closing the fingers on the left rein that the head is not pulled to the left.

The legs induce the gallop, the hands do little more than demand some collection. The slower the trot, however, the more the horse must be gathered between the hands and legs.

CHANGE OF LEAD AT THE GALLOP.

276. To change the lead when the direction of the curve changes, the trooper applies the aids for the new lead just as the horse enters upon the change of direction—the new curve.

There will be little trouble in getting the change of lead, provided the leg aids for the new lead are firmly applied as the horse enters the new curve.

The instructor should see that the troopers sit up and apply the leg aids without interference by the hands.

JUMPING.

277. In jumping the same calmness that is desired in all other work should be sought in both men and horses. Here also suppleness is the secret of a good jumping seat and hands.

The trooper should come up to the jump with an elastic hold with his legs, to include the calves, the buttocks well down in the saddle, the fingers relaxed on the reins and with all rigidity out of the back, shoulders, and arms, so that the body from the hips up will follow, the movements of the horse without affecting the legs, which, during the entire jump, should maintain their elastic hold on the horse's sides. The upper portion of the body should remain vertical. This will require a slight leaning to the front as the horse rises to the jump and a slight swaying to the rear as he lands. The hands

should remain low and the fingers relaxed. The arms should yield as the horse extends his neck to jump. If this does not give sufficient rein, the horse should be able to obtain it through the relaxed fingers.

No rushing should be allowed. When the horse rushes there is a great tendency to grip the reins in an effort to hold him as the jump is approached. No matter how much a horse rushes, the trooper must be taught to relax the fingers by the time he arrives within 15 feet of the obstacle.

Everything should be done to vary the type and location of jumps as this will do much to avoid rushing.

CAUTIONS.

278. All roughness with horses either while mounted or dismounted must be eliminated and men taught to realize that the more perfect the horseman the less apparent the effort to control his mount.

Steadiness of elbows and shoulders and suppleness of the muscles must never be lost sight of for a moment. This suppleness is the keynote of good horsemanship. The natural tendency is to contract the muscles and attempt to save oneself by clutching with the hands. The horseman must overcome these impulses, and in any sudden movement of the horse, learn to relax the body entirely; at the same time taking an elastic hold with his legs, but not making any special contraction of the fingers on the reins. This instinctive contraction is the hardest of all to overcome and often takes years of practice.

A few minutes' riding without stirrups should be had daily; no man can really ride who is not perfectly at home without them. In riding without stirrups the legs should hang well down and in rear of the stirrup straps. The legs must not be gripped tightly, simply a light, elastic feel. The muscles of all the rest of the body, especially of the back and fingers, must be relaxed and supple. The reins should be very long at the start. The riding without stirrups should not be continued long enough to tire or disgust the men.

TRAINING REMOUNTS.

279. The time required to train thoroughly a remount for the cavalry service depends upon so many conditions, such as the animal's age, condition, temperament, capacity, and conformation,

and the skill, zeal, industry, and ability of instructors and riders, that it can only be stated approximately. With young and undeveloped horses two years can be profitably employed. Recourse should then be had to a more extended system of equitation than can well be embodied in these regulations, and free use should be made of the knowledge and skill of the graduates of the Mounted Service School. But in emergencies, such as preparation for war, mature horses of good conformation and in excellent condition can be molded, in about three months' time, under competent instructors and riders, into mounts fulfilling fairly well the requirements of the trooper's horse. To meet such emergencies, the following suggestions are given.

280. When received in the regiment the remounts are placed under the care of the senior veterinarian and isolated for the minimum time necessary. They are then distributed to the squadrons.

During the period of training the young horse should always be ridden by the same rider. Training takes precedence over all other squadron work except the instruction of recruits. For this reason the troopers selected for it should be relieved from guard and fatigue duty during the period of training. They should be chosen for their love of horses and their patience and gentleness. All concerned in the training should be well instructed and skilful riders or there is no hope of success.

The various means of training are left to the initiative of the instructor, but they should all be based upon two fundamental principles—the winning of the horse's confidence and a methodical progression on the part of the rider, founded upon the association of sensations. He should never lose sight of the benefit to be derived from a training that progresses methodically and without haste.

The best test of the instructor's ability is the condition of the horses, the cleanness of their limbs, and their temper at the end of their training.

The instructor should constantly bear in mind these precepts: Never begin work without being absolutely sure of what is to be done.

Proceed in the horse's education from the known to the unknown; from the simple to the difficult.

Always use exactly the same effects to obtain the same results.

Remember that in the execution of every movement position should precede action.

Never ask anything of a horse while he is still under the impression of a preceding movement.

Never combat two resistances at the same time.

Never attribute to ignorance or bad temper of the horse the consequences of ignorance or lack of skill on the part of the rider.

Introduce the new features near the end of a lesson; then caress the horse and dismount.

It is pertinent to these rules to remember that during the whole course of the young horse's education a little progress every day should satisfy; demand that, but no more.

Remounts are not to be considered completely trained until they are able to execute all that is required of them in the school of the trooper, and have been accustomed to firing, to the music of bands, to fluttering of flags or pennons, and all the other sights and sounds peculiar to military formations and evolutions. Advantage should be taken of every opportunity during work in the open to carry forward this training of the horse in fearlessness of sights and sounds to which he is not accustomed.

281. Work.—Work is most important in training. It develops the horse and keeps his health and temper in balance. If he does not work, he grows fat and becomes too playful, blemishes himself under his own weight, increased by his rider's, and spoils his mouth by struggling against the hand. Yet he should be in rather high condition.

His work should be long out of doors (fully an hour and a half) and short indoors (not more than a half hour at a time).

282. Leading.—Leading by the side of steady, old horses during the first days is an excellent exercise for remounts. It accustoms them to strange objects and calms them. They should be led first on one hand and then on the other, so that the neck will not always be bent to the same side.

283. The longe.—All horses should be perfectly trained in work on the longe.

The first lessons are so important that they should be given by the instructor himself, or by a noncommissioned officer of experience and proved skill. If well given, only a few of short duration will be necessary.

The cavesson should be wide enough and well padded. It should be adjusted so that in work on the circle the eye on the side away from the trainer can not be injured; placed high enough not to hinder breathing; and in order that its action on the horse's nose may not be violent, it should not have too much play.

The driving whip is held in the right hand when the horse works to the left and vice versa, the butt coming out on the side of the thumb. It is kept out of sight as much as possible, and only used to threaten or for light touches. It should never have a lash on the end.

The instructor holds the longe in his right hand about 18 inches from the horse's head, the other end folded (not coiled) in convenient lengths, is held in the left hand. After patting the horse he moves forward, pulling lightly on the longe, clucking at the same time to the horse; he moves in this manner with the horse around the riding hall or inclosure on straight lines and gradually sharpened curves. He stops frequently, saying "Whoa," pats the horse and then passes to the right side, changes the longe in his hands and commences the same work to the right hand. When the horse moves forward at the cluck, stops at command, and moves willingly and without pulling, the instructor stops moving on straight lines, lets the longe slide a little, and puts the horse on a small circle of about 2 yards radius; he himself moves on a concentric circle, a little in rear of the horse's shoulders, so as to keep him moving. He often stops the horse, goes to him and pats him, and then moves him forward again.

The horse is worked on the circle to the other hand in the same manner. If he hesitates to move forward, the instructor slips to the rear and toward the croup, while yielding the hand that holds the longe. If need be, an assistant may help him. The important thing is not to be abrupt with the horse, and not to frighten him and run the risk of making him pull.

When the horse moves easily and quietly, at the walk, to both hands, on the small circle, the rest of the training is easy.

The instructor makes the horse take the trot, and then the gallop; to quicken the gait he uses the voice or shows the whip; at first he always accompanies the horse in his circular movement, keeping in rear, abreast of the haunches; if he wishes to stop him he moves toward the shoulders and little by little he reduces his own circle until he stands still.

The length of the radius varies with the increase of the gait. A slow trot on a small circle is an excellent exercise for the colt; but the extended trot and the gallop on a cramped circle would be dangerous to horses whose joints are not strong.

If the horse tries to escape, yield slightly to his movement, then resist with the hand and bring him back little by little.

If he stops, point the whip toward the croup to make him move forward; if he cuts in on the circle point the whip toward the shoulders to force him out.

If he pulls violently on the longe at the fast gaits, it is because the instructor has proceeded too fast in the beginning. Rest him often and begin the work again at the walk and slow trot on the small circle.

The early lessons may be made easier by using the corners of the riding hall. The wall may be useful in stopping a horse that is out of hand. The voice, loud at first, should find the same obedience when used more gently.

The longe also transmits the instructor's will; by light horizontal oscillations, the horse is kept from the center; by more or less marked movements, his gait is slowed or he is stopped when he does not obey the voice.

If the work on the longe has been well directed, the horse should be calm and evenly gaited on the circle; pass freely from one gait to another at the simple indication of the voice; come toward or go away from the center according to the freedom given; in a word, be on the hand with the slightly stretched longe, as later he should be with a light tension on the reins.

284. Saddling.—When the horse is quieted by work and perfectly gentle on the cavesson, take advantage of that to teach him gradually to bear the girths—a lesson which, if given in the stable, might prove difficult. The saddle is first put on without stirrups or stirrup straps; the girth, quite loose at first, is tightened gradually during the work. When the horse is accustomed to the contact of saddle and girth, the stirrups are added and allowed to hang down on each side at the walk and trot. He is thus prepared for the mounting lesson, which becomes easy; saddling and mounting a young horse for the first time on the same day generally arouses his resistance.

285. Mounting lesson.—The instructor selects, according to circumstances, the most opportune moment for giving the mounting lesson, always taking advantage of the calmness from fatigue at the end of the period of instruction.

This lesson may also be given during the work on the longe, but always after the horse has been quieted by exercise. The instructor personally directs the first lesson, which is given to each horse individually. The greatest gentleness and patience are here necessary.

Accompanied by an assistant, carrying a measure of oats if need be, he places himself squarely in front of the horse and pats him, taking hold of him only in case of necessity; the rider approaches the horse's head, pats him on the forehead, over the eyes, on the neck and haunches. He strikes the saddle, lowers and raises the stirrups, then takes the reins, leaving them very long. He mounts without hurry but without hesitation. If, during the lesson, the horse moves out of place or backs away, he goes back to the head, draws the horse forward with the snaffle reins and quietly begins again.

The rider in putting his foot in the stirrup is careful to point his toe down and not to touch the horse's side; this might disturb him. He should not stop after raising himself in the stirrup; that would break the equilibrium and run counter to the end sought. He should use his right hand in taking the right stirrup; in feeling for it with the toe he may frighten the horse.

In general, he should avoid putting the horse in march as soon as he is in the saddle, so that the idea of the forward movement will not be associated in the horse's brain with receiving the rider's weight.

It is best the first few times to end the day's work with the mounting lesson and send the horse to the stable as a reward.

If a horse is found very difficult, the instructor immediately puts him back on the cavesson.

The mounting lesson should be given on both the right and left sides. This instruction of the colt should be thorough. Absolute docility must be obtained even in the midst of noise and movement. However, it is well not to require too much at the very beginning.

286. Training to bear the saber.—The longe may be utilized to accustom the colt to the saber. As with all new requirements, it is wise to wait until the close of work to give the lesson.

Only the scabbard is put on at first. When the horse bears it without fear the blade is added, and he is then exercised at the various gaits. This work, it is understood, is interspersed with halts, caresses, and frequent rests.

This, however, is only a step toward the series of exercises during work on the road which accustom the horse to the saber.

287. Mounted work.—It is carried on both out of doors and in the riding hall. As soon as the young horse accepts his rider his conditioning should be begun and continued without inter-

ruption, and, whenever possible, take place out of doors. Although the young horse acquires his full strength most rapidly in the fresh air and on straight lines, the first lessons should be given in the riding hall to enable the instructor to exercise closer watch, to study better the men and horses, and to avoid the always possible accidents.

The mingling of old horses with the remounts has a very good influence at the beginning.

The riding hall is used also when the weather requires it. Advantage should be taken of the opportunity to give the remounts the first lessons of the aids.

288. First lessons of aids.—This preliminary education is quite necessary to permit the horse to be handled out of doors. It consists in teaching him to move forward at the call of the legs, to slow up and stop at the pressure of the legs and tension on the reins, and to turn under their action.

289. Movement.—The basis of all training is *freedom in the forward movement*. From the first the horse must be taught to *respond to the legs*.

290. Bending exercises.—To place the horse's head in position (to arch his neck correctly), the trainer standing near the horse's right shoulder takes the right rein in the left hand and the left rein in the right hand, the hands about 4 inches from the snaffle, plays with the bit and gently draws in the reins toward the withers as the horse drops his nose. When the horse relaxes his lower jaw by opening the mouth and carries in his head so that his face is nearly perpendicular to the ground and his muzzle level with the upper part of his shoulder, the trainer relaxes the reins and makes much of him.

To bend the neck to the right:

The horse's head being in position, the trainer (dismounted) gently drawing in on the right rein, carries the horse's head a little to the right, the left hand supporting the effects of the right. The horse's head should be kept at the same height. The trainer should be contented with a little progress at each lesson. Gradually and with the greatest patience and gentleness the horse is brought to carry his head around 90°, his face still remaining nearly perpendicular to the ground and his muzzle at the height of the upper part of the shoulder. The neck should not only be flexed (arched) at the poll but also bent to the right (always at the poll).

The horse's head should invariably be brought back into position; the movement is made smoothly and without haste, the hands regulating. The horse is then caressed.

These supplings are repeated mounted as soon as the horse understands what is wanted.

291. To turn on the forehand.—1. On the forehand, 2. To the right, 3. **MARCH.** At the first command, gather the horse and get him well between the hands and legs; at the third command, slip the right leg slightly to the rear, heel well shoved down, and increase its pressure until the horse yields and moves his haunches a step to the left, then slightly relax the pressure to reward him for his obedience; apply again, and relax until the horse has completed the movement step by step. The horse's neck must be held straight and he must be held in place by the reins and left leg, which acts with a good pressure at the girth.

Care must be taken that the trooper does not pull the horse's head around with the right rein; also that the left leg is held well against the horse's side, so as to steady his movements, prevent him from backing, from swinging his haunches faster or farther than is desired, and keep him well collected and ready to move to the front promptly, as is necessary in wheeling by fours.

Horses which do not yield to pressure of the leg may be made to do so by tapping the leg against the side.

Many old horses have contracted the habit of fighting the spur when applied and swing against the leg. If the trooper is careful to press and relax at each step they will usually give up the habit.

In obstinate cases the leg can be reinforced by light taps of the whip just in rear of the applied leg. The taps should cease as soon as the horse yields the haunches; then start again for another step.

This movement should not be practiced a great deal with young horses, or with those which do not promptly go up against the bit when the legs are closed to move them to the front.

292. To turn on the haunches.—1. On haunches, 2. To the right, 3. **MARCH.** At the first command, gather the horse well. At the command march, carry the right hand slightly to the right so as to lead the forehand a step in that direction. At the same time slip the left leg slightly to the rear and increase its pressure sufficiently to keep the haunches in place. As the horse moves the forehand in response to the opening out of the right rein, bring the left rein into play by contracting the fingers on it, the tension being in the direction of the right hock. The right leg must be

held close to the side to steady the horse and keep him from backing. The rider's weight is carried slightly toward the right hind leg. As the forehand moves to the action of the reins, the fingers are slightly relaxed as a reward and contracted again for another step.

See that the rider's legs and weight are placed as described, for there is a tendency to carry the legs away from the sides; and also that the contraction of the fingers on the left rein does not become a pull, causing the horse to back or to bend the neck to the left. Be satisfied with a few steps at first.

293. Backing.—In obstinate cases do a little work dismounted. Stand facing the horse's head, a snaffle rein in each hand. Start to lead the horse forward and, just as he moves, press him to the rear with the bit. Relax slightly and press him again as each forefoot is to be moved. If the horse fails to move a foot, stepping on it will cause him to do so.

294. Two-tracks.—In this movement the shoulders and haunches follow two parallel tracks. When executed to the right the left feet cross in front of the right feet, or conversely when executed to the left.

It is obtained by the action of the left rein against the neck and pressure of the left leg against the horse's side slightly in rear of the girth; the shoulders and haunches are thus pushed toward the right and the curve of the horse's body is convex toward the side to which he moves; his motion is in a direction oblique to that in which he is facing. If, however, it is desired to continue along the original path in two tracks the horse is first placed slightly across it. He must be held well between the hands and legs.

All two-track movements are very fatiguing to the young horse and should not be prolonged beyond a few steps. Undue persistence would make him refuse; he would strike his pastern joints while crossing his feet and would resist to escape pain caused by the blows.

The movement should not be required along a wall, for the horse would depend upon it for guidance instead of upon the aids. Besides, through fear of striking the wall, horses frequently hesitate to pass the foot nearest the wall in front of the other foot.

The terms *inside* and *outside* when used to refer to the horse's shoulder, leg, or foot in the two-track and shoulder-in are to be understood to mean that member which is on the corresponding side of the curve formed by the horse's body in executing the

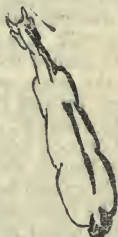
movement and not to refer to their situation with reference to the wall of the inclosure, or the curve on which the horse is progressing.

Whichever be the hand toward which the trooper is moving the horse may thus be placed and worked either with the right or left shoulder in.

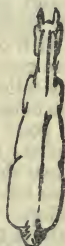
295. Shoulder-in.—If the displacement of the forehand in two-tracks is slightly accentuated by the hand and leg, the horse passes from "two-tracks" to "shoulder-in." The movement is executed by the commands: **RIGHT SHOULDER IN, STRAIGHTEN; LEFT SHOULDER IN, STRAIGHTEN.**

To place the horse in right shoulder-in, and work him in the most favorable attitude, the shoulders are moved off the line of march by the action of the right rein (open rein), assisted by the leg on the same side; this puts the horse in the first step of a turn. As soon as he is in this oblique and curved position, the line of direction previously followed is taken again, all the while keeping the horse bent and crossing his feet. The right rein, now a bearing rein, acting in the direction of the left haunch, bends the neck to the right and pushes the horse's whole body to the left along the original line of progression. The right leg acting slightly in rear of the girth also aids in moving the haunches to the left. The left hand after having yielded limits the bend of the neck, strengthens the action of the right rein, and also draws the forehand to the left; the left leg acts on the girth to keep up the forward movement.

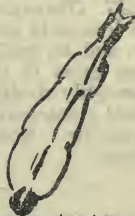
This exercise gives the horse suppleness and great freedom of all parts of the body. At the trot it is the best of all gymnastic exercises. It is easy to execute and its results are excellent and quick. The movement at the gallop is of little value in suppling.



Left shoulder in



Straighten



Right Shoulder in

It is given on the circle at first. Little by little the horse is made to understand it by carrying him off the circle a few steps, and then after caressing, straightening him and beginning again. As soon as he understands what is required and the movement is well executed at a walk, it is repeated at the trot.

It should not be executed on the track; for the horse, attracted by the latter, seeks to return to it, and consequently only bends his neck instead of yielding his shoulders, the very opposite of the object sought.

For good execution of the movement the hand holding the inside shoulder in should act rather steadily on a short rein and not by pulling from front to rear.

The horse should be frequently exercised in the *shoulder-in*, care being taken to alternate the shoulders and to move to the front for several steps between the changes. The supplings must last a very short time only.

296. Gallop.—With some old horses which have habitually galloped with one lead it will be very difficult to get the other lead. In these cases, or when time is too limited to practice proper methods, the following rough method will serve the purpose:

If the horse habitually gallops lead left and a lead right is desired, take a good extended trot on the right hand, approach the knee guard of the riding hall at an angle of about 45° with the horse well up against the bit, and just as the horse reaches the guard kick hard with the left heel and let him move along the track to the right at the gallop. In all probability the lead right will be had; if so, maintain it for some time, using the correct aids. A few of these lessons will be sufficient.

297. Obstacles.—The longe should be used in the young horse's first lessons in jumping. The obstacles should in the beginning be low, and be gradually increased to about 3 feet in height as the horse gains in strength and cleverness. When he has become thoroughly obedient and willing he should be led in the open over varied obstacles such as ditches, little brooks, up and down steep slopes, etc. Horses should be taught to lead freely under all conditions.

CAUTIONS.

298. If suppleness is obtained in the man, then with training, suppleness and willing obedience will be obtained in the horse. Suppleness is a necessity for a good seat and light hands. Light

hands are a necessity for relaxed muscles of the jaw, poll, and neck. These are necessary for lightness and willing obedience in the horse.

Quiet halts by use of the legs and weight of the body with relaxed fingers will gradually teach the horse to halt without setting the jaw against the hand.

Moving to the front promptly again will produce responsiveness to the legs.

These halts can be reduced gradually to half-halts and finally to forward and backward movements, reciprocally following each other for a few steps in each direction only. This will develop great lightness and balance. The forward and backward or half-halt and forward movements should merge into each other so smoothly that there is no perceptible abruptness. Suppleness, limbering up, free play of the shoulders, and engaging of the haunches can be developed by work on circles, serpentines, and figures of eight.

Steadiness will be developed by long, well-cadenced trots.

Quietness will come with even gaits and long, swinging gallops.

CARE OF HORSES.

GENERAL PROVISIONS.

299. A most important duty of the cavalry officer is keeping his horses in such training and health as will enable them to do their work to the best advantage. The proper performance of this duty requires careful instruction of the men in the treatment, stabling, management, watering, feeding, grooming, and exercising of the horses, and such continuous supervision and inspection by officers as will insure that instructions are understood and are being carried out.

Cavalry officers should make themselves thoroughly acquainted with the natural history and physiology of the horse, and with the effects of different methods of treatment, changes of diet, etc., upon his system and powers of endurance.

They should have a familiar knowledge of the symptoms and methods of treatment of the diseases that are common to horses, what to do in emergencies, and a good knowledge of the effects of the medicines supplied to the squadron. They should also be practically familiar with the principles of horseshoeing.

Sore backs are, as a rule, the result of carelessness or neglect; the immediate cause may be faulty adjustment of the saddle or equipment or bad riding.

At each halt officers and noncommissioned officers should inspect the adjustment of saddles and equipment of their men and should at no time tolerate lounging in the saddle.

Horses when received in the regiment are assigned to squadrons according to color, under direction of the commanding officer. They are branded on the hoof of one fore foot with the letter of the squadron and the number of the regiment on the same line; as D 7. Their purchase number is found tattooed on the inside of the upper lip.

Captains make permanent assignments of horses; after a horse is so assigned, his rider will not exchange him nor allow him to be used by any other person without permission.

RULES FOR THE CARE OF HORSES.

300. All troopers must be taught and must thoroughly understand the following rules for the care of horses:

Horses require gentle treatment. Docile but bold horses are apt to retaliate upon those who abuse them, while persistent kindness often reclaims vicious animals.

Before entering a horse's stall and when coming up behind him, speak to him gently, then approach quietly.

Never kick, strike about the head, or otherwise abuse a horse.

Never punish a horse except at the time he commits an offense, and then only in a proper manner.

Give the horse an opportunity to drink before leaving the picket line or stable, and before putting the bit in his mouth. In cold weather warm the bit before putting it in the horse's mouth.

Never take a rapid gait until the horse has been warmed by gentle exercise.

When a horse is brought to the stable or picket line in a heated condition, never allow him to stand uncovered; put a blanket on him and rub his legs, or walk him until he is cool. If he is wet, put him under shelter, not in a draft, and rub him with a wisp until dry.

Never feed grain to a horse when heated. Hay will not hurt a horse however heated he may be.

Never water a horse when heated, unless the exercise or march is to be immediately resumed. Sponging out the mouth and nostrils is refreshing to the heated horse and will not hurt him.

Never throw water on any part of a horse when heated.

Never allow a horse's back to be cooled suddenly. To cool the back gradually, remove the blanket and replace it with the dry side next the horse, and replace the saddle, girthing it loosely.

Never put the horse up for the night until he is thoroughly clean, especially around his legs, pasterns, and feet.

Individual men returning from mounted duty or pass will report their return to the noncommissioned officer in charge of stables, who will inspect each horse and see that he is properly cared for.

STABLES AND STABLE MANAGEMENT.

301. Foul air and dampness are the causes of many diseases of the horse; hence the importance and economy of spacious, clean, dry, and well-ventilated stables.

The picket line should be established in the immediate vicinity of the stable. The floor of the picket line should be raised, and trenches to carry off the rain should be provided, so that the ground upon which the horses stand may be kept dry.

Paddocks, with shade and water, should be provided near the stables; if there is no shade, shelter from the sun should be extemporized. The picket line and paddock should be sprinkled to keep down the dust; crude oil may be used to advantage. Bedding racks should be provided near each stable.

The horses are assigned stalls and places on the picket line by platoons, and as nearly as practicable according to their usual place in ranks. The name and hoof number of the horse with the name of his rider is placed over the stall.

The stable sergeant takes immediate charge of the stables, picket line and paddock, forage, and stable property in general.

The stable sergeant is responsible that the stables and their surroundings are kept at all times thoroughly policed and free from smells; he is usually assisted by one or more stable orderlies.

Sufficient men are detailed as stable police to perform the general police and except at night to collect all manure as soon as it is dropped, either in stables, on the picket line, or in the paddocks. The stable police also assist in the feeding, watering, and bedding of the horses.

Manure and foul litter must not be allowed to accumulate in or near the stables, but must be carried to the manure heap daily.

In the morning, stalls are cleaned and the stables policed under direction of the stable sergeant.

The bedding is taken up, carefully shaken out, and sorted. All parts of the bedding which can be used again are taken to the bedding racks and spread thereon for a thorough drying; parts which can not be used again are sent to the manure heap. Special attention is necessary in this matter, as the allowance of straw is insufficient under most favorable conditions. In the evening the dried bedding, mixed with such fresh straw or bedding as may be necessary, is laid down. The bed must be soft and even, with the thickest part toward the manger.

If practicable, all woodwork within reach of the horses should be protected with sheet metal or painted with a thin coat of gas tar; other woodwork and brick should be painted a light shade and then kept clean and free from dust.

Feed boxes must be kept clean; they should be washed from time to time with dilute vinegar and always after feeding bran mash or other soft food.

During the day, except in very cold or stormy weather, the horses, when not being used or fed, should stand at the picket line or in the paddocks. In hot climates, however, if there is not sufficient shade on the picket line or in the paddocks, it is better to keep the horses in the stables during the heat of the day.

Smoking in the stables is prohibited.

One or more covered lights should be provided in the stables at night.

STABLE DUTY.

302. Captains are responsible for the proper performance of stable duty. In addition to the grooming, they will require such other duty as may be necessary to keep the stables, horses, and equipment in proper condition.

Mounted work must be followed immediately by "stables"; the horses are then thoroughly groomed, the saddlery cleaned and put away in perfect order.

All squadron officers will be present at this time, the platoon leaders superintending the work of their platoons.

The horses should also be brushed off before going out to drill or exercise in the morning, and in the evening before being led in.

GROOMING.

303. Grooming is essential to the general health and condition of the domesticated horse. Horses improperly groomed, with ragged manes, unkempt pasterns, and feet improperly looked after, are an indication of an inefficient organization. Clean horses properly equipped and smartly turned out add to the *esprit* of an organization and give a fair indication of its discipline and efficiency.

The grooming is done by platoon, under the supervision of the platoon commander and the platoon sergeant, assisted by the non-commissioned officers of the platoon.

It is not to be done in a formal or routine manner but in such a way as to bring results. Unless it is done in the stable, or where there will be danger of fire, the men will be allowed to smoke, and cheerful but not disorderly conversation will be encouraged. When a trooper has finished his work and it has been inspected, he should be allowed to attend to other duties or be dismissed.

According to circumstances, the platoon or the squadron may be marched to or from the stables or the men may be allowed to go and return individually.

On returning from a drill or exercise, and usually in the field, the horses are unbridled, girths are loosened, and they are watered and fed. The men are then free to put on stable clothes, relieve themselves, and prepare for the work of grooming and to care for their equipments while the horses' backs are being cooled under the pressure of the saddle. The men then begin their stable work comfortably and deliberately.

The captain or the officer in charge supervises generally the grooming and care of saddlery of the platoons, holding the platoon commander responsible and calling his attention to any deficiencies or neglects.

The first sergeant assists the captain or officer in charge in coordinating the work of the platoons and stable force.

The horses of the officers, of the first sergeant, and of the four platoon sergeants are groomed by designated troopers. All other noncommissioned officers and men groom their own mounts. Extra horses and those whose riders are absent are groomed by men assigned to the work by the platoon sergeant.

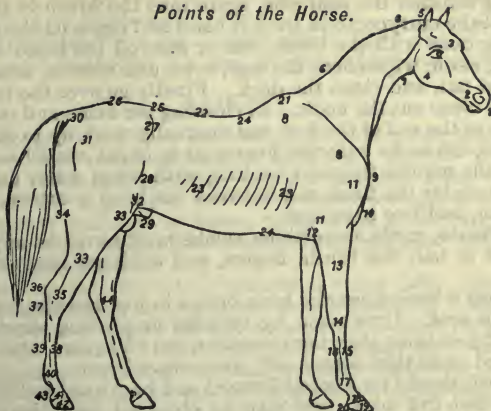
The principal use of the currycomb is to clean the brush, and for this purpose a piece of hard wood with channels along its surface answers equally well.

The currycomb should never be used on the legs from the knees and hocks downward nor about the head, and when occasionally required to loosen dried mud or matted hair on the fleshy parts of the body it must be applied gently.

To groom the horse proceed as follows:

Take the currycomb in the right hand, fingers over back of comb, and the brush in the left hand; first clean the legs of the near side, then take the currycomb in the left hand and the brush in the right and clean the legs of the off side. The legs will thus have time to dry while the rest of the grooming is being done. Next return to the near side, change the brush and comb into the other hands and begin brushing at the upper part of the neck, the mane being thrown to the other side out of the way; thence proceed to the chest, shoulders, back, belly, flanks, loins, and rump. The principal working of the brush should follow the direction of the hair, but in places difficult to clean it may be necessary to brush against it, finishing by leaving the hair smooth. After every few strokes clean the brush from dust with the currycomb.

In using the brush the man should stand well away from the horse, should keep his arm stiff, and should throw the weight of the body against the brush.

Points of the Horse.*Head.*

- 1, Muzzle.
- 2, Nostril.
- 3, Forehead.
- 4, Jaw.
- 5, Poll.

Neck.

- 6, 6, Crest.
- 7, Throttle or wind-pipe.

Fore quarter.

- 8, 8, Shoulder blade.
- 9, Point of shoulder.
- 10, Bosom or breast.
- 11, 11, True arm.
- 12, Elbow.
- 13, Forearm (arm).
- 14, Knee.
- 15, Cannon bone.
- 16, Back sinew.

- 17, Fetlock or pastern joint.
- 18, Coronet.
- 19, Hoof or foot.
- 20, Heel.

- 21, Withers.
- 22, Back.
- 23, 23, Ribs (forming together the barrel or chest).
- 24, 24, The circumference of the chest at this point, called the girth.
- 25, The loins.
- 26, The croup.
- 27, The hip.
- 28, The flank.
- 29, Sheath.

Body or middle piece.

- 30, The root of the dock or tail.
- 31, The hip joint, round, or whirl-bone.
- 32, The stifle joint.
- 33, 33, Lower thigh or gaskin.
- 34, The quarters.
- 35, The hock.
- 36, The point of the hock.
- 37, The curb place.
- 38, The cannon bone.
- 39, The back sinew.
- 40, Pastern or fetlock joint.
- 41, Coronet.
- 42, Hoof or foot.
- 43, Heel.
- 44, Spavin place.

Hind quarter.

- 31, The hip joint, round, or whirl-bone.
- 32, The stifle joint.
- 33, 33, Lower thigh or gaskin.
- 34, The quarters.
- 35, The hock.
- 36, The point of the hock.
- 37, The curb place.
- 38, The cannon bone.
- 39, The back sinew.
- 40, Pastern or fetlock joint.
- 41, Coronet.
- 42, Hoof or foot.
- 43, Heel.
- 44, Spavin place.

Having finished the near side, again take the brush in the right hand and the currycomb in the left hand and begin on the off side.

Having done with the brush, rub or dust off the horse with the grooming cloth, wipe about the face, eyes, and nostrils, arrange the mane and tail, and clean the dock. Finally go over the legs once more and clean out the hoofs. In cleaning the mane and tail begin brushing at the *end* of the hair and gradually work up to the roots, separating the locks with the fingers so as to get out all scurf and dirt. Tails require frequent washing with warm water and soap. The skin under the flank and between the hind quarters must be soft, clean, and free from dust.

Currycombs, cards, or common combs must never be applied to the mane or tail; the brush, fingers, and cloth are freely used on both.

The wisp is used when the horse comes in wet and also for stimulating the coat. It is made by twisting or plaiting straw into a rope. The ends are then bent together, cut off square, and rubbed on a board until they form a soft, even straw brush.

The wisp should be worked forward and backward well into the coat, so that full advantage may be obtained from the friction. After finishing with the wisp the coat should be laid flat.

Hand rubbing is beneficial. When a horse has had very hard, exhausting work, his legs should be hand rubbed and afterwards bandaged, taking care that the bandages are not tight. An exhausted horse should also be given stimulants and warm gruel.

The value of grooming is dependent upon the force with which the brush is used and the thoroughness of the other work.

Officers and noncommissioned officers should, by continuous personal supervision, see that the grooming is properly done.

No horse should be considered in order until he is thoroughly clean; his mane and tail brushed out, and laid flat; his eyes and nostrils wiped or washed, and hoofs put in order.

The pasterns and that part of the mane where the crownpiece of the bridle rests should be neatly trimmed, and the mane and tail plucked.

At each "stables" the horses' feet and shoeing are carefully examined. Horses requiring shoeing are reported to the platoon sergeant, who notifies the stable sergeant.

Each horse should be inspected by an officer before the man who has groomed him is permitted to leave.

The sheath will be kept clean by washing, when necessary, with warm water and castile soap.

A good discharge from the cavalry should carry with it the presumption that the holder is a good horse manager and groom.

WATERING.

304. Except when they are heated, it is desirable that horses should have free access to water at all times. As this is usually impossible, it becomes necessary to water at stated times.

Horses should, if possible, be watered before feeding, or not until two hours after feeding. As horses rarely drink in the early morning, the watering must follow the feeding, but after the proper interval, if practicable.

A horse requires from 5 to 15 gallons of water daily, depending upon the temperature and upon the work he is doing. Except in very cold weather, horses should be watered at least three times daily—in the morning, before the noon feeding, and before the evening feeding. In warm weather, water drawn from a cold well or spring should be allowed to stand long enough for the chill to pass off before the horse is allowed to drink.

On the march the oftener the animals are watered the better, especially as it is not usually known when another watering place will be reached. By watering from buckets many watering places not otherwise available may be utilized.

If a mounted command has to march a long distance without water, so that it will be necessary to encamp en route, the animals are fed, but denied water until just before starting, when they are permitted to drink freely. The command marches in the afternoon and does not encamp until it has accomplished at least half of the distance; it moves early the next morning to reach water.

Horses must be watered quietly and without confusion; the manner in which this duty is performed is a good test of the discipline of a mounted command.

The horses are led or ridden at a walk to and from the watering place. No crowding will be allowed, nor will any horse be hurried or have his head jerked up from the water.

The horses are watered under the immediate direction of the senior officer or noncommissioned officer present at stables or at other time of watering; an officer should always be present when the horses of other commands are liable to be met at the watering places.

FEEDING.

305. Horses should be fed three times a day—at reveille, in the middle of the day, and at night. This rule must be rigidly enforced on the march, the noon grain feed being carried on the horse. Ordinarily one-third of the grain ration is fed each time. Hay, as a rule, is not fed in the morning, but about one-third of the ration should be fed at noon, except on the march, and the remainder at night.

The use of bran once or twice a week is important for stabled horses. In spring or early summer they should be grazed. A lump of rock salt should be kept in each manger.

Before feeding hay it should be thoroughly shaken out with a fork, so as to get rid of dust and seed; it is also advisable to moisten the hay before giving it to the horse. The grain, if possible, should be run over wire screens or allowed to fall through the air so as to remove dust.

It is advisable to feed at least a portion of the allowance of hay before feeding the grain.

Grain should never be fed or placed in the mangers until it is certain that the horses are thoroughly cool.

In the morning the horses are usually fed at or before reveille. The noon feed of hay is usually placed in the mangers while the organization is at drill, but the grain is not fed until the horses are thoroughly cool. The evening feed is placed in the mangers after the stable has been thoroughly policed for the night.

All horses do not require the same amount of forage; the amount given each horse must be based, therefore, upon his individual requirements.

When forage can not be obtained, grazing should be required at every spare moment, especially early in the morning when dew is on the grass.

All forage received by an organization should be checked for weight and to see that it is up to contract specifications. All officers should be familiar with the characteristics of good forage and the manner in which it is commercially graded for contract specifications. To obtain this knowledge, officers should be encouraged to visit large commercial stables.

The daily allowance of oats, barley, or corn is 12 pounds for each horse; that of hay, 14 pounds. The allowance of straw for bedding is 100 pounds per month for each animal.

Good oats weigh about 40 pounds to the bushel; barley, about 48 pounds; corn, about 56 pounds. Pressed hay weighs about 11 pounds per cubic foot.

The standard bushel in the United States contains 2,150.4 cubic inches. A cubic yard contains 21.69 bushels. A box 16 by 16.8 by 8 inches holds 1 bushel; a box 12 by 11.2 by 8 inches holds half a bushel; a box 8 by 8 by 8.4 inches holds 1 peck; a box 8 by 8 by 4.2 inches holds one-half peck, or 4 quarts.

EXERCISING.

306. To keep a horse in good condition he should have two hours' exercise daily. This exercise should be *under the saddle*, or, if that is impracticable, it should be given by leading beside another horse.

In leading care must be taken to lead as much on the left as on the more convenient right side. This can be automatically regulated by having the leading done on the right side on the odd numbered days of the month and on the left on the even numbered days.

In special cases it may be given on the longe, but this must be done under proper supervision or injury may result.

Turning a horse loose in a paddock does not give him proper exercise, and if the paddock is a large one, where he can get up speed, it results in giving him a taste for freedom which inspires a high-spirited animal to try to get rid of his rider when he feels like having a run.

The horse should associate the control of a rider with the pleasure of all exercise, so that he may accept it naturally as a fixed habit.

It is objectionable for one man to lead more than one extra horse for exercise, as the gaits must then be more restricted, and on ordinary roads the footing for some of the horses will be poor.

If a large space is available for paddock purposes it should be divided into several inclosures, giving space for a part of the animals to move about quietly in each, but not enough to encourage them to gallop.

SICK HORSES.

307. Horses on sick report are under the immediate charge of the stable sergeant, assisted by the farrier.

When a veterinarian is present he should prescribe the treatment to be given to sick horses, and he should inspect all sick horses at least once daily.

The veterinarian should also visit each organization at least once a day at one of the stated "stables;" he should be freely consulted

as to minor ailments and as to the means of keeping the horses in fit condition.

In the absence of a veterinarian the sick horses are treated by the stable sergeant under the direction of the captain.

Serious disease is best avoided by immediate and constant attention to minor ailments, galls, etc.

If a horse sustains an injury, neglects his food, refuses water, or gives any evidence of sickness, his condition should be reported at once to the stable sergeant. It is the duty of any man observing such condition to make the necessary report.

SHOEING.

308. Horses will be shod according to the principles outlined in the authorized manual.

All officers must understand the principles of proper shoeing and be able to supervise the work of the horseshoers.

A trooper should know how to put on a shoe in an emergency; the following extracts from the manual are therefore here incorporated:

The Army Horseshoer, 1912.—The foot should be prepared so that it will approximate as nearly as possible to a state of nature, and only such trimming is allowed as is absolutely necessary for the purpose of fitting and securing the shoe.

The knife must never be used on the bars or on the frog. The bars strengthen the hoof and assist in its expansion. Cutting, therefore, weakens them and prevents them from performing their function.

The practice of using the knife to trim the bars or to cut a notch at the junction of the frog and bar at the heel (called opening the heels in civilian shops) always tends to produce contracted feet.

Never use a knife on the hoof of a horse that has been running barefoot nor on flat feet.

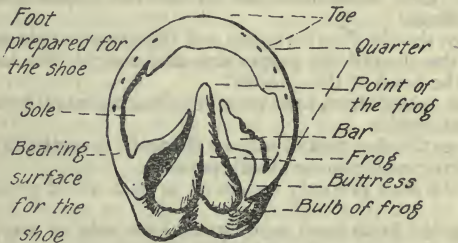
Ragged parts of the frog may be cut away by careful use of the nippers.

With a flat foot it is frequently necessary to remove a part of the outer edge of the wall in order that the nails may be driven in the white line where they belong. This is the *only* case where it is permitted to rasp the outside wall. The outer coating of the wall and the layers of dead horn on the sole and frog serve to retain the moisture in the hoof.

The hot shoe must never be applied to the horse's foot under any circumstances.

When shoes are left on the feet for too great a length of time corns and other ailments result. Ordinarily a shoe should be removed once a month. The lightest shoe that will last for this time is the best shoe. It should carefully follow the form of the foot, or if the foot is broken the shoe follows the original shape of the foot. Its length is regulated by the bulb of the frog.

The ground surface of the shoe should be level and smooth, except for use in snow, when the shoe with the ground surface concaved prevents balling. That portion of the upper surface which presses against the bearing surface of the foot must be level, smooth, and accurately shaped to support it, and when the upper shoe surface is wider than the bearing surface the inner edge must be con-



caved to avoid excessive sole pressure. This is one of the most important requisites of correct horseshoeing. Concussion of the sole against the inner edge of the upper shoe surface invariably produces soreness.

One side of the shank of a horse nail is flat. The other side is concave and also has a bevel near the point. This bevel as it enters into the horn forces the point of the nail in the direction of the other side (flat side). Therefore in driving a nail always hold it with the flat side toward outside edge of the shoe.

Nails should come out at a height of not more than 1 inch from the bottom of the hoof.

In garrison, at the discretion of the colonel or of the commanding officer, the horses may be left unshod, but shoes will be kept fitted for each horse ready to be put on.

Inspection of shoeing.—The following examination should be made while the horse is standing on a level floor with the foot on the ground:

(a) Are the axes correct when viewed from the front and from the side?

(b) Does the shoe follow the outer line of the wall to the last nail hole and from there extend outward, allowing about one-eighth of an inch at the heel for expansion? Has the rule against rasping the hoof to fit the shoe been violated?

(c) Is the toe clip in the center properly made and properly seated?

(d) Are the nails driven at the proper height and proper distance apart? Have any old stubs been left in the wall?

(e) Are the clinches well turned and set in, of the proper size, and have they been smoothed off but not rasped sufficiently to weaken them?

The foot should then be raised and the examination continued.

(f) Is the shoe of the proper size and weight; the last nail hole back of the bend of the quarter?

(g) Has enough horn been removed; has too much been removed; is the foot level?

(h) Does the shoe rest evenly on the wall, covering the buttresses and showing no air space at any point?

(i) Is the shoe properly concaved so as to avoid pressure on the sole?

(j) Has the knife been used on the bars, sole, or frog?

(k) Are the nails well seated and of the proper size?

(l) Are the heels of the shoe correct in width and thickness and are they properly rounded without sharp edges or points? Is their length even with the bulb of the frog?

CARE OF SADDLERY.

309. The saddlery and equipment must always be cleaned after use. This duty, like the care of the horse, is to be regarded as part of the mounted duty itself; thus a drill is not over until horse, saddlery, arms, and equipments have been put again in condition. According to need the leather is simply wiped off with a damp sponge or well soaped and cleaned. In no case must it be soaked with water.

If the soap used does not contain a sufficient amount of free oil the leather must be oiled to keep it pliable. A mixture of one-half neat's-foot oil and one-half mutton tallow, well rubbed in, keeps leather in good condition. Special care is taken to keep the underside of the skirts of the saddle and the parts which do not come in contact with the clothing well oiled. The seat and outside of the skirts will rarely require oil.

Metal parts are kept clean and free from rust; they may require oiling if not regularly used.

The saddle blanket must be kept clean and soft and free from wrinkles. After use it must be dried and then well shaken (unfolded). It must never be folded wet and left thus with the saddle. Provision will be made in the saddle room or stables for hanging it up to dry.

In the field its use as bedding for the men will not be allowed and special care will then be exercised to keep it free from dirt.

When necessary the blanket should be thoroughly cleansed by repeated immersions in tepid soapsuds and hung over a pole or line to dry without wringing or pressing it.

FITTING THE SADDLE.

310. There are six axioms in saddle fitting:

- (a) The withers must not be pinched nor *pressed* upon.
- (b) The central line of the back must have no pressure put upon it.
- (c) The shoulder blades must have full and unhampered movement.
- (d) The loins must not carry weight.
- (e) The weight must be put upon the ribs through the medium of the muscles covering them.
- (f) The weight must be *evenly distributed* over a surface which extends from the play of the shoulders to the last true rib.

The regulation saddle adjusts itself automatically to the width of the horse's back. This automatic adjustment is brought about by applying all the weight that is to come upon the side bars, through their center of rotation, thus leaving the side bar of the loaded saddle free to adapt itself to the varying width of the back.

In order to preserve this freedom, no attachments of any kind should be placed on the side bar, other than as issued, and no weight should be permitted to rest on the side bars other than that transmitted to them through the hinges. The cantle roll support and straps have been devised especially to raise the roll and keep all weight off the side bars.

While the side bars adapt themselves automatically to the slope of the horse's back it is necessary to ascertain whether they bear evenly on the back and whether the arch and seat are clear of the spine.

To determine this the saddle is placed first on the naked back, the *front* of the side bar resting in the pit of the shoulder (the hollow back of the shoulder blade). If there is then sufficient clearance of the withers and backbone no trouble will be encountered when the saddle is put on with a blanket.

A new blanket is then folded and placed in proper position on the back and the saddle placed on the blanket so that the front end of the side bar approaches closely the shoulder blade without pressing upon it. The blanket is pushed well up into the pommel arch. The saddle is now girthed and a man placed in the saddle.

It must be kept in mind that the blanket reduces the width of the pommel arch and narrows the saddle across the top of the side bars.

The fit of the saddle can never be determined without seeing a man in it; parts may appear out of harm's way, when no weight is in the saddle, which are brought dangerously close under the pressure of a man's weight.

The first thing to ascertain is the freedom from pressure on the withers; the hand must pass readily between the blanket and the withers, over the top as well as along the side.

In applying this test the man in the saddle should lean forward and the examiner must not be satisfied with anything less than the introduction of the entire hand.

The next thing is to ascertain freedom from pressure on the shoulder blade. This is done by passing the hand underneath the blanket from the front until the play of the shoulder blade can be felt. The foreleg is raised and advanced to its full extent to the front by an assistant while the hand is in this position. If this

can be done, while the man in the saddle is leaning forward, without pinching the fingers between the side bars and the shoulder blade the fit in this respect is satisfactory. The test should be made on both shoulders.

If the fingers are pinched the shoulder blades will be pinched and the saddle must be raised by folding the saddle blanket up on each side, so as to place extra thickness under the bars or by placing extra felt on the side bars.

The rear ends of the bars are next tested for loin pressure with the man in the saddle leaning back. The flat of the hand should find ready admission between the ends of the bars and the loins.

Assuming that the above defects have been remedied the saddle should be ridden in for half an hour or more to ascertain whether the pressure of the side bars is evenly distributed.

On completion of the ride the saddle is carefully ungirthed and lifted from the blanket without disturbing it in any way. The blanket will be found to bear the imprint of the side bars and an examination of this depression will show at a glance whether the bars press evenly from top to bottom and from front to rear.

The examination must be quickly made as the blanket soon loses the impression of the side bars.

Any irregularity in the fit of the side bars may be remedied by the introduction of pieces of felt to fill up the spaces between the side bars and the blanket. With very little practice these pieces of felt may be cut to the required shape and thickness with a very sharp knife. Some edges will need to be as thin as a knife edge; other parts may require the addition of more than one thickness.

After determining where these pieces of felt are to rest on the wooden side bars they are placed in the upper and inner side of the felt coverings of these bars and fastened in the proper place with a few stitches of thread.

The most radical alterations in the fit of the side bar can be effected with these strips; the method is simple and quick, and does not require a trained workman.

It must not be forgotten that no matter how much care may be taken in fitting a saddle, such fitting is only adapted to the horse in the condition in which he is at the time.

On active service the saddles require daily attention. They should be inspected as regularly as are the feet. Every weak point in the fit of a saddle in the squadron should be known and the remedy arranged for. In no other way is it possible to bring horses through severe work with sound backs.

THE PLATOON.

311. The platoon is an element of the squadron, but may be used independently.

The movements of the platoon as part of the squadron and as an independent unit are taught in the School of the Platoon.

Collective training begins in the School of the Platoon.

312. The men of the squadron, except the first sergeant, the quartermaster sergeant, and the stable sergeant, are assigned to platoons by the captain.

THE PLATOON MOUNTED.

(Plates I to IX.)

313. Formation of the platoon.—The normal formation is in line in double rank. The squad consists of four files, and is commanded by a noncommissioned officer or selected private. The platoon consists of four squads. When the platoon is much reduced it may be formed in three squads. The right and left squads are commanded by sergeants. The squad leader of the first (right) squad is posted as No. 1 of the front rank of his squad; the squad leader of the second squad (a corporal) is posted as No. 4 of the front rank of his squad; the squad leader of the third squad (a corporal) is posted as No. 1 of the rear rank of his squad; the squad leader of the fourth squad is posted as No. 4 of the front rank of his squad. Other corporals are posted as No. 1 of the rear rank of the first squad and No. 4 of the rear rank of the fourth squad. The corporal on the left of the right center squad is known as the center corporal. When there are but three squads in the platoon the center corporal takes position as No. 2 of the front rank of his squad, and the commander of the third squad is posted on the left of its front rank, and is covered by a corporal. The right and left sergeants exercise supervision over their half-platoons, and when they leave their position for this purpose the corporals who follow them in the rear rank assume charge of their squads. When there are but three squads the right sergeant supervises the center and right squads. The senior sergeant in the platoon is posted as file closer one horse-length in rear of the center of the platoon.

By proper interchange, troopers must be equally instructed in riding in the front and rear rank, but those whose duties require them to occasionally leave the ranks and those riding white or gray horses are placed in the rear rank. When a vacancy occurs in the front rank after formation it is filled by the rear-rank trooper of the file.

The chief of platoon is the leader of his platoon; in line he is followed at one horse-length by the center corporal and in column by the leading fraction. He is herein referred to as the leader.

314. To form the platoon.—The leader takes place, mounted, facing the position where he wishes the platoon to form and commands: **FORM PLATOON.** The center corporal places himself at stand to horse 6 yards from the leader and facing him. The other troopers of the front rank take place in line with him and on his right and left, the leader of the right squad on the right of the rank, the horses 18 inches apart. The front rank is completed to 16 or 12 men. The rear rank forms at one horse-length from the front rank. The file closer, dismounted, supervises the formation from the rear. The leader commands: **COUNT FOURS.** The platoon counts fours from right to left in each rank.

If in case the number of troopers for the rear rank is less than the number established in the front rank, the file closer will leave the necessary vacancies in the rear rank in place of No. 3 in squads from left to right; if the number available for the rear rank be still insufficient, the necessary places as No. 2 of the rear rank will similarly be left vacant.

If it is necessary to verify absentees, the file closer takes position on line with the leader in front of the right file and calls the roll.

315. To dismiss the platoon.—As prescribed in the school of the trooper, the troopers falling out from both ranks.

316. The leader is responsible for the regularity of gait; the platoon conforms to his movements. The platoon when properly instructed maneuvers habitually by signal, aided by the voice when necessary.

The file closer supervises from the rear, maintaining discipline and cohesion in the ranks, thus permitting the leader to devote himself entirely to leading.

In *instruction*, the leader may leave the conduct and the command of the platoon to his next subordinate and place himself where he can best observe the execution of the movement.

Movements are practiced progressively from walk to gallop, the gallop not being attempted until the platoon is thoroughly proficient at the slower gaits.

The distance of one horse-length between ranks is that suited to ordinary conditions, and may be increased when bad ground, dust, or any other reason makes more room desirable.

317. The platoon must be drilled frequently with 16 files, and in single rank with 24 or 32 men in rank, frequently with swords drawn. The platoon will be trained in tactical exercises and maneuvers.

318. The platoon must be taught to jump obstacles in line and in column, the instruction beginning with increased distance between the ranks.

OUTLINE OF INSTRUCTION.

Close order:

- (a) Mount and dismount.
- (b) Dress.
- (c) Open and close ranks.
- (d) Rein back.
- (e) March in line.
- (f) Formation of single rank.
- (g) Change of direction.
- (h) Turn.
- (i) Oblique.
- (j) Column of squads (platoon column), half-squads, and files.
- (k) Deployment into line from column.
- (l) Rally and assembly.
- (m) Charge.

Extended order:

- (a) As foragers.
- (b) Line of squads.
- (c) Charge as foragers.
- (d) Scouts.

To fight on foot.

Employment of the platoon.

CLOSE ORDER.

To mount and dismount.

319. The platoon being formed, at the command: 1. **PREPARE TO MOUNT**, Nos. 1 and 3 move forward one horse-length; and at 2. **MOUNT**, troopers mount; 3. **FORM RANK**, rear numbers move up into places; the leader and the file closer take their places.

At the command: 1. **PREPARE TO DISMOUNT**, the leader and Nos. 1 and 3 move forward one horse-length. At the command: 2. **DISMOUNT**, all dismount and stand to horse.

320. The platoon dismounted in four ranks may be formed in two ranks by the command: **FORM RANK**. Nos. 2 and 4 align themselves on 1 and 3.

321. The single rank mounts and dismounts in a similar manner.

Dress.

322. At the command: **DRESS**, the center and flank non-commissioned officers place themselves on a line one horse-length in rear of the leader and establish the line upon which the troopers form, touching stirrups lightly toward the center and glancing to both right and left to see that they are on the line. The leader stands fast.

The rear-rank troopers arrange themselves exactly in rear of their front-rank men, at one horse-length. They dress upon the flank and center, as prescribed for the front rank. At the command: **FRONT**, the dressing ceases, and eyes are turned to the front.

To open and close ranks.

323. Being in line, to open ranks; 1. **Open ranks**, 2. **MARCH**. At the command **march**, the rear rank reins back to two horse-lengths from the front rank, each trooper being careful to keep the direction of his front-rank man. The leader moves forward one horse-length and faces his platoon. The file closer reins back to two horse-lengths from the rear rank.

1. **Close ranks**, 2. **MARCH**. At the command **march**, the rear rank closes to one horse-length, and the leader and the file closer resume their places.

To rein back.

324. 1. **Backward**, 2. **MARCH**, the leader and all the platoon rein back, until the command: 1. **Platoon**, 2. **HALT**.

To march in line and to halt.

325. At the command: 1. **Forward**, 2. **MARCH**, the leader and all the platoon move forward together. The center corporal follows in trace of the leader, keeping his distance carefully. The troopers in each rank while dressing upon the center likewise regulate their movements by those of the leader, yielding to pressure from the center and resisting pressure from the flanks. They should look and march in the direction set by the leader, glancing toward him occasionally.

The flank sergeants, by maintaining carefully gait and direction and by supervising the troopers of their half-platoon, contribute greatly to the regularity of movements. Corrections relating to alignment or crowding in ranks must be made calmly and gradually.

The platoon is halted by the command: 1. **Platoon**, 2. **HALT**. The platoon dresses without command. The march in line should be practiced frequently at all gaits and for long distances, avoiding halts as far as possible. The leader should always point out the direction.

326. The platoon passes from the walk to the trot and to the gallop at the command: 1. **Trot**, 2. **MARCH**; 1. **Gallop**, 2. **MARCH**. To return to the trot or walk: 1. **Trot**, 2. **MARCH**; 1. **Walk**, 2. **MARCH**. The platoon may be started from the halt, at the trot, or gallop, and may be halted from any gait where circumstances require. In changing gait a distance of at least three horse-lengths should be passed over after the preliminary command or signal is given and before the new gait is begun.

Obstacles in the line of march.

327. Where an obstacle is encountered which interferes with the march of only a few troopers, these fall back without command and resume their places after passing it.

When a terrain covered with obstacles is encountered, the platoon opens out, alignment is no longer kept, and each trooper

chooses his route, keeping an eye on his leader, who continues to regulate the gait and direction. Where a passage is encountered which is too narrow to permit the front of the platoon to pass, and when the leader does not wish to break into column, he commands: **AT WILL**. The center corporal remains in rear of the leader; as many as practicable of the troopers to the right and left of the center move up on line with the leader. The flank sergeants and troopers who can not find room pass to the line of the file closer and all close up, head to croup, with their horses' heads opposite the intervals in front. At the command: **ASSEMBLE**, the platoon re-forms.

328. If caught in a defile or when circumstances require a rapid withdrawal, the leader commands: 1. **Troopers to the rear**. The troopers gain space in which to turn; 2. **MARCH**; each trooper makes a **left about**. The platoon inverted, ranks re-formed, now follows the file closer in the new direction. The leader regains the front of his platoon at the first opportunity. He re-forms his platoon as soon as practicable by the command: **ASSEMBLE**, or 1. **Troopers to the rear**, 2. **MARCH**.

Single rank.

329. Single rank may be used to attack a weak or disordered enemy or to diminish the vulnerability of the platoon under fire; it should never be used against compact cavalry.

The platoon in line, at the command: 1. **Single rank**, 2. **MARCH**, the troopers of the front rank open out to the right and left and each trooper of the rear rank moves up on the left of his front-rank man. If necessary, fours may be counted.

To resume double rank: 1. **Double rank**, 2. **MARCH**, the rear-rank troopers diminish the pace and resume their places in the rear rank; the ranks close toward the center.

Change of direction.

330. The change of direction is only a special case of the march in line; the leader conducts the platoon in the new direction.

The platoon follows the leader as in the march in line, and the troopers remain closed and aligned toward the center, increasing or diminishing their pace or gait accordingly. On completing the change, the leader indicates the new direction.

The turn.

331. The turn is but a special case of the change of direction; its object is to facilitate the movements of the platoon in the squadron. In the turn the leader moves at the gait of the march; at the walk, if from the halt; or, at the gait ordered.

332. The platoon being in line, 1. **Right turn (Right half-turn, incline to the right)**, 2. **MARCH**. The leader indicates the direction to be taken after the turn and rides on a circle; at a walk, with a radius of half-platoon front, plus 3 yards; at a trot of half-platoon front, plus 6 yards, and at a gallop of half-platoon front, plus 9 yards. The troopers of the rear rank incline outward during the turn, so as to gain ground toward the marching flank, and those nearest the pivot move their horses' haunches toward the marching flank, so as to clear the ground for the following unit.

To oblique.

333. At the command: 1. **Troopers, right oblique**, 2. **MARCH**, the leader and the troopers execute individually a half-turn to the right, and then march at an angle of 45° to the original direction, each trooper's right knee in rear of the left knee of the trooper on his right. The platoon moves in the new direction, regulating by the right, the front parallel to the original front.

To resume the original direction: 1. **Forward**, 2. **MARCH**.

The platoon column.

334. The platoon column (column of squads) is a formation for route and maneuver. The distance between fours is 4 feet.

Column of squads from line is formed from the right only. The platoon being at a halt or marching: 1. **Column of squads**, 2. **MARCH**. At the command **march** the right squad moves forward, the leader taking position one horse-length in front of it. The other squads follow in succession by the shortest route as soon as they have the necessary space, each taking its place in rear of the preceding squad. Under supervision of the squad leader, each four aligns itself on the left trooper. The file closer takes position 4 feet in rear of the platoon.

Should it be necessary to reduce the length of the column without changing the formation, the command: **CLOSE INTO THE INTERVALS** is given. The rear-rank troopers of the leading squad

close and ride in rear of the interval to the left of their front-rank troopers, their horses' noses on line with the croups of the horses in front. The succeeding squads increase their pace, close, and successively take the same formation, the front-rank troopers riding in rear of the intervals to the right of the corresponding numbers in the preceding rear rank.

At the command: **TAKE DISTANCE**, the fours drop back to a distance of 4 feet, and the troopers follow in trace.

335. The platoon in line or column may be moved for short distances to either flank or to the rear by the commands: 1. **Fours right**, or **Fours right about**, 2. **MARCH**. Each four in each rank turns on a fixed pivot.

336. To change direction, the leader leads the platoon in the new direction or commands: 1. **Column right (half right)**, or 1. **Incline to the right**, 2. **MARCH**. The leading four executes right turn, the pivot maintaining the gait and moving with a radius of 2 yards; the others move forward and turn to the right on the same ground.

337. The column moves to the rear by changing direction 180°.

The leader conducts the head of the column by example and signal, or commands: 1. **Right about**, 2. **MARCH**.

The leader can, if circumstances require it, command: 1. **Troopers to the rear**, 2. **MARCH**.

The troopers in each rank open out to right and left, and each executes an individual left about. The file closer then leads temporarily.

Column of half-squads and column of files.

338. The column of half-squads is a formation for route and maneuver. Being in line or platoon column, at the command: 1. **Column of half-squads**, 2. **MARCH**, the platoon breaks by half-squads according to the principles laid down for breaking by squads.

Column of files is formed by similar commands and means from line or column.

The column of half-squads or of files moves forward, changes gait or direction, moves to the rear, halts, and forms line by the same commands and means as the platoon column. The column of half-squads closes into the intervals by the same commands and means as the column of squads.

The platoon in column, column of half-squads, or files is mounted and dismounted by the same commands as in line. The troopers

open out to the right and left front in platoon column or column of half-squads.

Being in column of half-squads the leader commands: 1. **Column of squads**, 2. **MARCH**. Files 3 and 4 of the leading squad form on the left of files 1 and 2 by an oblique. Each of the other squads forms in a similar manner when near its place in column and closes to 4 feet.

Platoon column or column of half-squads is formed in a similar manner from column of files.

The deployment into line from column.

339. To form line from column, the leader moves in the direction toward which he wishes to form line and commands: 1. **Line**, 2. **MARCH**. The leading squad obliques by trooper to the right and then forms in line, leaving space for the second squad to follow with the center corporal in rear of the leader. The remaining squads move to their places, each on the left of the preceding squad. Line is formed from column of half-squads or from column of files on the same principles.

340. For emergency, line may be formed directly to the right from column of squads, half-squads, or files by the rally.

The rally and assembly.

341. The platoon being dispersed or *in any formation*, at the command: **RALLY**, the troopers move at a gallop by the shortest line and form in double rank, without regard to their regular places, in rear of the leader.

342. To resume the normal formation, the leader commands: **ASSEMBLE**, and indicates the gait. Exposure to fire should be avoided.

The charge.

343. The charge in line is the normal attack of the platoon in close order.

The essential conditions to its success are *cohesion and vigor in the shock*.

The charge should begin at a short distance from the enemy, and the gaits employed to reach the charging point will depend upon the terrain as known or as indicated by the ground scouts, the condition of the horses, and other circumstances.

The charge must be pushed home.

In these exercises the enemy should always be outlined or represented, and the plan of the exercise should be carefully explained.

344. The platoon with sabers drawn, marching at the gallop, or at the extended gallop, the leader commands, before reaching the point where the charge is to begin: 1. **To attack**, and when at about 50 yards from the enemy, 2. **CHARGE**. At the command **charge**, repeated by all the troopers, each pushes his horse to full speed and takes the charging position. In order to utilize fully the individual audacity, physical force, and skill of the more efficient men as an example to the others, it is important that the boldest troopers on the best horses be not restrained. The short duration of the charge permits of this personal initiative without sacrificing cohesion.

To avoid attracting the attention of the enemy, loud commands and the repetition of "charge" may be omitted.

345. The charge terminates with the pursuit or the mêlée. The success of the mêlée depends upon the individual bravery and skill of the trooper and the training of his horse. The troopers use the *point*, shouting at each thrust, "**point**," and seek the officers of the enemy.

The mêlée.

346. The mêlée should not be practiced immediately after the charge, as this tends to create a false impression. The aim is to charge through, re-form, and charge back. The mêlée, however, may be imposed by the enemy, and must therefore be practiced, but as a separate exercise.

The platoon marching in line, at the command: **MÊLÉE**, the troopers leave the ranks, mingle, and carry out the exercise prescribed for individual combat. The mêlée may be terminated by the rally or the pursuit. At the command: **PURSUE** (or the sounding of the charge), the troopers at full speed pursue the represented enemy. To terminate the pursuit, the leader commands: **RALLY**, or **ASSEMBLE**, or sounds the recall.

EXTENDED ORDER.

347. The platoon takes extended order from any formation and in any direction. When possible the extension should be made upon terrain protected from the enemy's fire.

As foragers.

348. The platoon being in any formation, at the command: 1. **As foragers** (or **as foragers at so many yards**), 2. **MARCH**, the troopers move out at a gallop to right and left of the center corporal, each rear-rank trooper moving up on the line to the left of his front-rank man. If the interval between troopers is not indicated in the command, it is 4 yards.

The foragers move forward and to a flank, halt, change direction and gait upon the command of the leader, who can rally or assemble them in any direction. When practicable, the rally and assembly should be made under cover. At the command: 1. **Troopers, to the rear**, 2. **MARCH**, each trooper turns to the left about. To move to the front: 1. **Troopers forward**, 2. **MARCH**.

In line of foragers, at the command **halt**, the troopers halt faced to the front.

The line of squads.

349. The platoon being in any formation, halted or marching, at the command: 1. **Line of squads**, 2. **MARCH**, each squad moves at a gallop to its place, led by the squad leader, who marches in front of his squad. Squad leaders take sufficient interval to allow for extension into line of foragers.

The line of squads possesses the advantage of having the squad under the direct control of the squad leader.

Squads may be deployed as foragers, formed in single rank, column of half-squads, or of files, according to mission, terrain, enemy's fire, etc. In deploying as foragers the troopers extend on No. 2 of the front rank. When not leading his squad, the squad leader takes his place in the line.

The dispersion of the platoon in depth by successive squads affords the means of crossing a fire-swept zone with small groups. The movement is executed at a gallop at the command: 1. **Squads**, 2. **At so many yards distance**, 3. **MARCH**. The squads may be extended during the movement.

350. The platoon must maneuver and fight in extended as well as in close order. Foragers and squads must be trained to fight on foot, to take advantage of cover, to check the enemy, to capture patrols, to search thickets, woods, etc.

The line of squads moves forward, to the rear, and by the flank, changes direction, and halts by the same commands as the line of foragers, the squad leaders giving the necessary commands for their squads.

The charge as foragers.

351. Being in line of foragers, the leader draws his weapon, the troopers following his example, and then commands: 1. **Gallop**, 2. **MARCH**, 3. **To attack**, 4. **CHARGE**. The principles laid down for the charge in close order apply. When the pistol is used the leader takes position in the line at the command **charge**. The troopers of each file support each other, and the platoon endeavors to envelop the enemy. Small bodies may charge as foragers directly from any formation, at the command: **AS FORAGERS, CHARGE**.

The rally and assembly are executed as prescribed for close order.

SCOUTS.

352. Scouts are of two classes:

(a) Ground scouts.

(b) Reconnoitering scouts.

The rôle of ground scouts is solely to ascertain whether the ground in the vicinity is passable for cavalry, to indicate obstacles and the best points of passage.

The reconnoitering scouts are employed to guard against surprise and gain information; their numbers and movements will depend upon circumstances. They fire only to give warning or in self-defense. The leader designates the noncommissioned officers and men to compose the group of scouts or details an entire squad: 1. **Such squad as scouts**, 2. **(Such object or mission)**, 3. **MARCH**; or the whole platoon may be dispersed as scouts: 1. **Platoon, as scouts**, 2. **(Ridge to the left)**, 3. **MARCH**.

Troopers should be trained as scouts, including methods of communication, early in their instruction.

PATROLS.

353. (a) Security.

(b) Reconnoitering.

Security patrols are detached for the immediate *protection* of a command. A combat patrol is a security patrol which exercises its functions during combat.

Reconnoitering patrols are sent to greater distances to obtain information.

The troopers should be practiced in acting as scouts and patrols to bodies larger than the platoon.

TO FIGHT ON FOOT.

354. When giving the command for dismounted action, the leader will take a position from which he can plainly indicate the direction toward which the dismounted men are to be led.

To facilitate movement of the led horses, the platoon is generally formed into column of squads before dismounting to fight on foot. Under special circumstances, however, dismounted action may be taken from any formation. When foragers are to fight on foot, the squads assemble, dismount, and again deploy on foot. In emergencies foragers may dismount to fire, holding the horses on the lariat or by the bight of the rein over the right arm. The horses may later be linked by the command: **LINK HORSES**. The horse holders mount.

The leader, dismounted, commands the dismounted platoon.

No. 4 is the horse holder, except when he is a noncommissioned officer, in which case No. 3 is horse holder. No. 2 of the front rank of the first squad takes the leader's horse. The horse of No. 1 of the front rank of the first squad is linked to that of No. 3; No. 2, with the platoon leader's horse on his right, assists in leading the first four horses. The file closer remains mounted in command of the led horses.

The horse holders may be dismounted when circumstances clearly indicate that an early movement of the led horses is not probable.

Sergeants in assisting the leader go where their presence is necessary; corporals remain in ranks, but direct their squads and set the example, being the first to go forward and the last to retreat.

In the absence of the link, the horses may be fastened together by passing the reins through the halter ring and tying them in a slipknot so that the horses' heads shall be about 2 feet apart.

In defensive positions, all the horses may be fastened in couples by tying the snaffle reins of each horse to the cantle of the saddle of another; or they may be linked together in a circle and left to the care of one horse holder, who dismounts; or this horse holder may hold the horses of Nos. 4 by the reins. The horses of each half platoon may be tied in a circle to a coiled lariat or a stirrup strap.

355. The led horses should be as near the dismounted line as a protected situation will allow; they are not changed while this condition lasts, unless the dismounted line makes a material change of position.

The horses while linked by fours must be drilled at all gaits—in leading, in changing direction, forming line, etc., as when mounted.

356. At the command: **TO FIGHT ON FOOT**, Nos. 1, 2, and 3 dismount; No. 3 passes his snaffle reins over his horse's head, and gives them to No. 4, who, holding the bight in his left hand, grasps them with his right, at about 6 inches from the bit; No. 2 links his horse to the halter ring of No. 3; No. 1 links to No. 2; the reins of Nos. 1 and 2 and the bit reins of No. 3 are placed behind the pommel, and the left stirrup crossed in front of the pommel. When No. 3 is the horse holder Nos. 2 and 4 give him their reins, which he holds in his right hand. If the horses are to be coupled or otherwise secured, the leader indicates the method before dismounting.

As soon as the horses are properly secured the squad leader leads his squad at a run to its place in rear of the platoon leader, where he forms it in double rank. In going into dismounted action, dash and spirit should characterize the movement.

The leader may dismount a portion of his platoon by the command: 1. No. 1 (or such numbers), 2. **TO FIGHT ON FOOT**.

357. The platoon leader after having detached the necessary vedettes turns the platoon over to the file closer and proceeds, followed by a connecting link, to reconnoiter. The reconnaissance completed, the leader rejoins his platoon or directs that it be led to a certain point, indicating the best method.

While there is little to fear from hostile fire, the leader advances the platoon in line or line of squads, so as to take advantage of cover.

To cross dangerous ground, occupy a position, or open fire: 1. **As skirmishers** (or **as skirmishers at so many yards**), 2. **MARCH**. The troopers extend at double time, as in the deployment as foragers. If no interval be ordered, it will be 1 yard. In emergencies the deployment may be made immediately after dismounting, the command **as skirmishers** being given immediately after the command to fight on foot.

The skirmishers advance either by platoon or by squads; they endeavor to gain ground without rigid attention to dress, and regulate their movements on that fraction of the platoon which is most advanced.

THE ASSAULT.

358. To assault the leader commands: **PREPARE TO ASSAULT**. The men cease firing, each inserts a fresh clip and

the leader then commands: **CHARGE**, which is repeated by all, and leads the platoon at a run to the assault.

On reaching the enemy's position a rapid fire is opened from the full magazine. If the enemy be not dislodged, and there is no time to reload, the pistol may be used.

THE RALLY.

359. To get his platoon rapidly in hand, the leader commands: **RALLY**. At this command, repeated by the squad leaders, the skirmishers form at double time, in single rank, and at the order, in rear of the platoon leader.

THE ASSEMBLY.

360. To re-form the platoon (double rank), the leader commands: **ASSEMBLE**.

TO MOUNT.

361. The leader leads the platoon to the vicinity of the led horses or causes the latter to be advanced to meet the platoon, and commands: **MOUNT**.

At the command: **STAND TO HORSE**, the troopers move quickly but quietly to their horses, unlink, and stand to horse.

If the signal to horse is sounded the horses are brought up at the gallop and the platoon moves rapidly to meet them.

THE EMPLOYMENT OF THE PLATOON.

362. (a) Alone, as for exploration and security, etc.

(b) In the squadron, as advance or rear guard, detached posts, flank guard; etc.

(c) In cooperation with other arms, as for scouting, covering, and aiding in the attack.

(d) In small operations, as foraging, demolitions, escort, attack on a convoy, ambuscade, etc.

THE PLATOON DISMOUNTED.

363. Its formations and movements conform to those of the platoon mounted, with the natural modifications.

THE ASSEMBLY.

364. At the command: **ASSEMBLE**, the platoon forms as prescribed for the mounted formation. The troopers take a light

touch of elbow toward the center; the center corporal is 2 yards in rear of the leader; the rear rank is 2 yards in rear of the front rank, and the file closer is 2 yards in rear of the center of the rear rank.

DRESS.

365. At the command: **DRESS**, the troopers establish themselves on a line 2 yards in rear of their leader. They yield to pressure coming from the center, keeping a light touch of elbows in that direction. At the command: **FRONT**, eyes are cast to the front and the platoon stands at attention.

THE MARCH IN LINE.

366. In changes of direction and turns, the leader moves so that the marching flank can keep the regular step.

THE TURN.

367. The radius of the leader or of the center corporal is half the front of the unit, plus 1 yard.

EXCEPTIONAL MOVEMENTS TO THE REAR, OR FLANK.

368. For an exceptional movement to the rear, the command is: 1. **Troopers about**, 2. **MARCH**. The troopers turn individually to the right about.

369. Under special circumstances movements may be made to either flank or to the rear, by squads or by fours. In turning by squads, the command is: 1. **Squads right** (or **squads right about**), 2. **MARCH**; the rear rank closes to 10 inches at the preparatory command. Exceptionally the line may be moved to the flank by the command: 1. **Troopers right**, 2. **MARCH**.

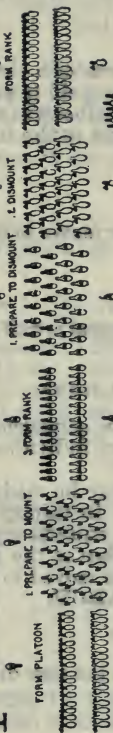
TO OBLIQUE.

370. The troopers make a half face and move in the new direction. If halted, the troopers face to the front.

COLUMN OF SQUADS.

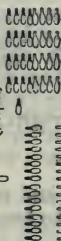
371. In columns of squads or half-squads the distance between ranks is 32 inches. At the preparatory command for forming column, the rear rank closes to 10 inches.

I THE PLATOON



1. Four right 2. MARCH.

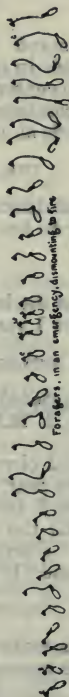
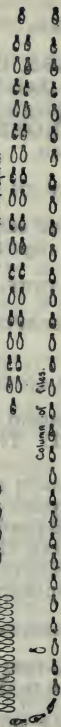
(head post)



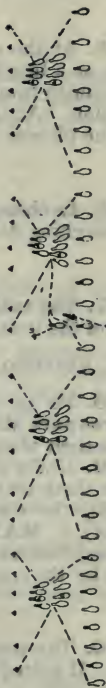
Column of half squads.

Column of files.

The Platoon
Facing a wall
"Back"



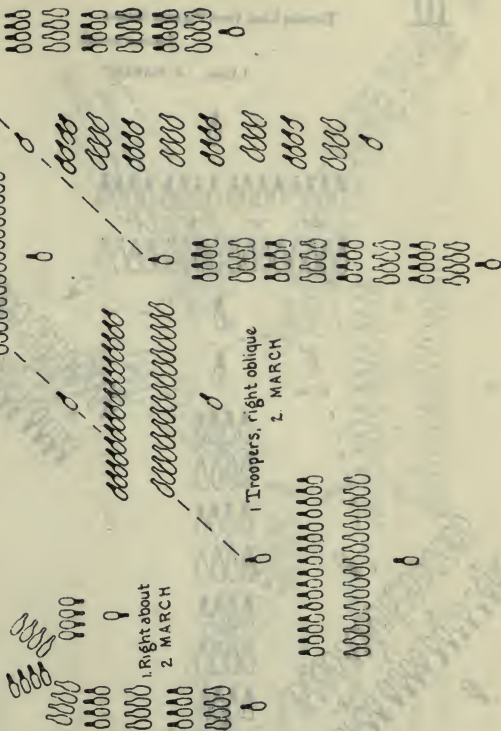
DISMOUNT - COMMENCE FIRING



TO FIGHT ON FOOT (Single)

II

THE PLATOON



III

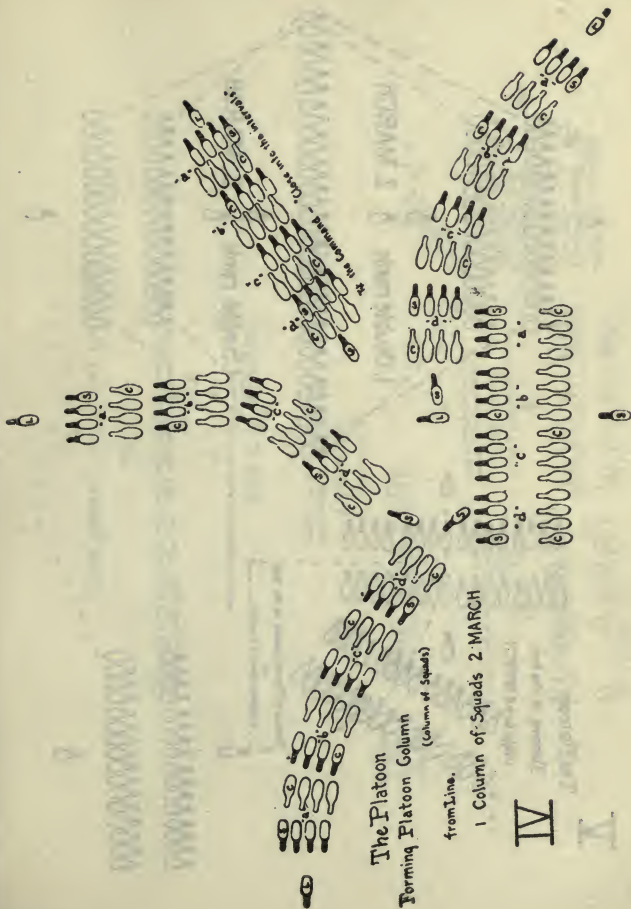
The Platoon

Forming Line from Platoon Column

(Column of Squads)

1. Line. 2 MARCH



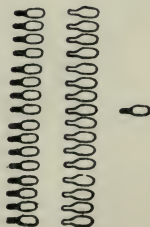
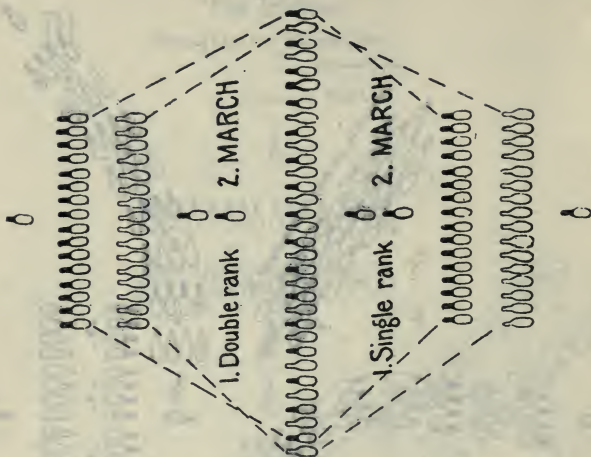
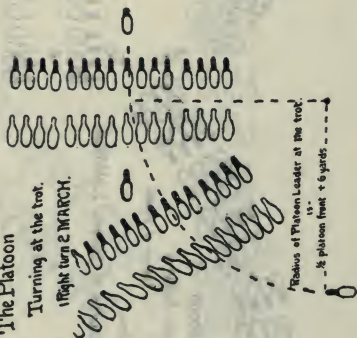


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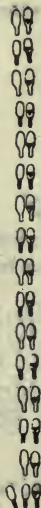
The Platoon

Turning at the trot.

1 Right turn 2 MARCH.



1. Odd numbers 2. TO FIGHT ON FOOT



RALLY (skirmishers)



ASSEMBLE
(skirmishers)



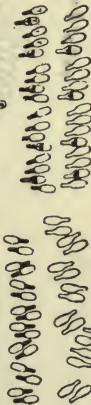
THE PLATOON

VI

Led horses
after dismounting in line



Horses
Coupled.

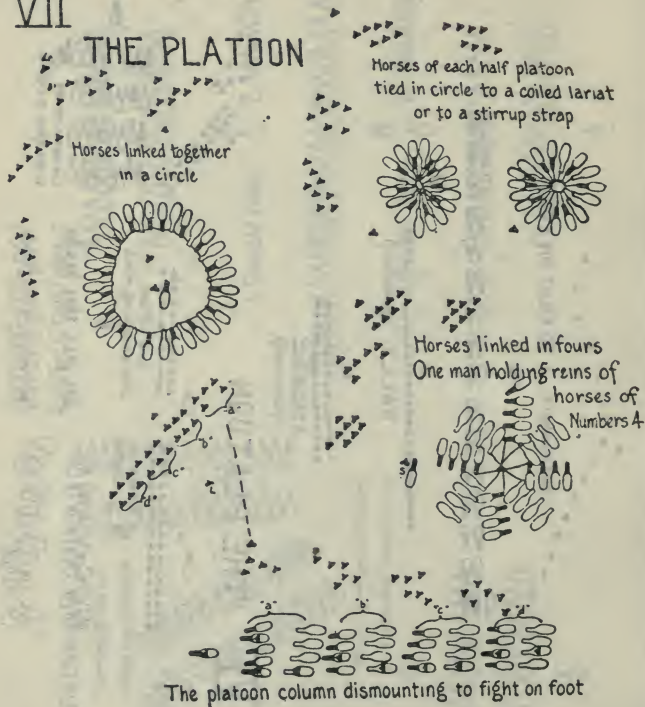


Led horses moving
to the flank, in eights.



VII

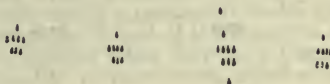
THE PLATOON



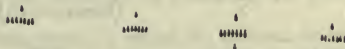
VIII

THE PLATOON

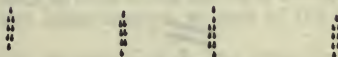
LINE OF SQUADS



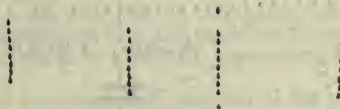
(In single rank)



(As foragers)

(In columns of $\frac{1}{2}$ squads)

(In columns of files)



THE PLATOON

IX

1 Squads 2 At 300 yards distance 3 MARCH



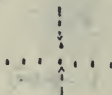
300 yds



300 yds

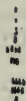


300 yds



(Extended as foragers)

300 yds



THE SQUADRON.

THE SQUADRON MOUNTED.

(Plates X to XVII.)

372. The squadron is the component unit of the regiment. It is composed normally of four platoons, known as the first, second, third, and fourth, each under a permanent leader assigned by the captain. The object of the School of the Squadron is to train the platoons to execute together what they have learned separately, and to teach the squadron its movements, whether acting alone or as part of the regiment.

The squadron executes the movements of the platoon. The captain may cause the platoons individually to execute a movement not otherwise provided for by prefixing the word "Platoons" to the command.

The squadron maneuvers in squadron column or line of platoon columns, forms line for the charge, marches in column of squads, half-squads, or files, takes extended order, and dismounts to fight on foot.

The captain is the leader, but, having indicated the direction to the leader of the directing platoon, he may leave his position.

THE SQUADRON IN LINE.

373. In line, the platoons are side by side without interval. The captain is 15 yards in front of the leader of the second platoon: the first sergeant two horse-lengths in rear of the center of the squadron.

When the squadron is acting alone, one trumpeter follows the captain. When the squadron is in the regiment, all the trumpeters are in ranks.

The platoons are numbered from right to left in line and from front to rear in column.

374. Movements are executed on indication from the captain. He may direct a lieutenant to act as squadron leader and indicate to him the movements to be executed, supervising their execution himself.

When necessary to attract the attention of his platoon leaders, the captain commands: **ATTENTION.** Platoon leaders give the

command for the movement ordered, move in the corresponding direction, and take the prescribed gait.

The platoon leaders give verbal commands only when dust, darkness, fog, or any other cause renders signals inadvisable. Verbal commands should be no louder than absolutely necessary. The platoon leaders pay special attention to maintaining a regular gait and preserving proper distances and intervals.

The file closers, under supervision of the first sergeant, rectify mistakes and insure steadiness and cohesion in the ranks.

375. The squadron should maneuver frequently with sabers drawn. The squadron must be frequently exercised, with 4 platoons of 16 front each, even when necessary to omit entirely the rear rank.

Lieutenants must be practiced in commanding the squadron and sergeants in commanding platoons.

376. The platoons being formed, the captain takes post, mounted, facing the position where he wishes the squadron to form, and commands: **FORM SQUADRON**. The platoons take position, mounted, in line or in column, as directed by the captain, in the order of their permanent designation.

After the squadron is formed it is maneuvered without regard to the order of the platoons in line or column, except that in column *the two right platoons and the two left platoons follow each other*.

To dismiss the squadron, the captain commands: **DISMISS YOUR PLATOONS**.

OUTLINE OF INSTRUCTION.

Close order:

- (a) Line.
- (b) Change of direction.
- (c) Column (of platoons).
- (d) Deployment into line.
- (e) Line of platoon columns.
- (f) Route column by squads, half-squads, and files.
- (g) Charge.

Extended order:

- (a) Extended order in line and in column.
- (b) Foragers.
- (c) Scouts and patrols.
- (d) Rally.
- (e) Assembly.

To fight on foot.

Employment of the squadron.

CLOSE ORDER.

Line.

377. The march in line conforms to the principles prescribed for the platoon. The captain is in advance of the leader of the second platoon, who follows in his trace; the other platoon leaders regulate on the leader of the second platoon.

The platoon leaders will, without command of the captain, so lead their platoons as to pass obstacles with the greatest facility, and then resume the original formation.

378. The squadron may be formed in a single rank for special purposes; as—

(a) To mask a movement;

(b) To attack infantry or artillery under special circumstances.

The squadron in line, at the command: 1. **Single rank**, 2. **MARCH**, the leaders of the first, third, and fourth platoons take their intervals from the second; the leader of the second platoon, as soon as he has the space, forms single rank; the other platoon leaders take the same formation and regulate on him. In single rank the first and third platoons are echeloned at one horse-length on the second, and the fourth at one horse-length on the third.

At the command: 1. **Double rank**, 2. **MARCH**, the platoon leaders re-form their platoons in double rank and lead them to their places in line.

379. To gain ground to a flank, the captain forms squadron column to that flank and leads, or indicates the direction.

380. To march the squadron to the rear: 1. **To the rear**, 2. **MARCH**. Each platoon executes a turn of 180° to the left.

To oblique.

381. 1. **Right oblique**, 2. **MARCH**. Each platoon executes a turn of 45° ; all regulate on the right platoon. The oblique by trooper may be used for short distances. The platoon leaders continue in a line parallel to the original front. To resume the original direction: 1. **Forward**, 2. **MARCH**.

Change of direction.

382. Change of direction by the squadron in line is made upon command of the captain or indication by him of the new point of direction.

When the change of direction is executed at a rapid gait, the platoons of the marching flank may move in echelon, regaining their places in line after the change of direction is completed.

Squadron column.

383. The squadron column is a formation for assembly, march, and maneuver. The distance between platoons is 6 or 10 yards, according as they have 12 or 16 files. The captain is 15 yards in advance of the leader of the first platoon.

The file closers are on the right of the rear ranks. The first sergeant is on the right of the file closer of the rear platoon. At the command for dismounting in squadron column, the platoon leaders go to the left flank of their platoons.

Breaking from line into squadron column.

384. The squadron in line to form column, the captain commands: 1. **Column** (or, on such platoon, **column**), and indicates the direction; 2. **MARCH**. The second platoon, or the platoon indicated, follows the captain, or goes in the direction indicated by him; the other platoons follow.

Movements in squadron column.

385. In marching it is of the greatest importance that platoon leaders put their platoons in movement simultaneously, and that the pace be uniform. Trace and distance must be corrected gradually.

386. When passing a defile of less width than platoon front, the method already given in this case for the platoon applies. The formation taken at the command: **AT WILL**, given by the platoon leaders, is used principally for passing short defiles without unnecessarily lengthening the column. Platoons are re-formed on emerging from the defile, without command from the captain.

387. The column must be trained to follow the leader in all directions and at all gaits. The captain may command: 1. **Column right**, 2. **MARCH**.

388. To march to the rear: 1. To the rear, 2. **MARCH**, each platoon executes a turn of 180° to the left.

389. When the squadron in column or in column "at will" is in a defile, and it is necessary to move to the rear, the captain

commands: 1. **Troopers to the rear**, 2. **MARCH**. Each platoon conforms to what is prescribed in the school of the platoon. While the captain is obliged to remain at the rear of his squadron, his orders are transmitted from platoon leader to platoon leader, preceded by the words: "Captain's order."

390. The squadron column may execute an oblique march by the command: 1. **Right oblique**, 2. **MARCH**. Each platoon executes a turn of 45° . The captain places himself in front of the leader of the directing (the leading) platoon; the other platoon leaders regulate so as to keep in a line parallel to the original direction of the column.

In the oblique by trooper the platoon leaders are careful to keep in a line perpendicular to the original front. This movement, however, is only used to gain short distances.

Deployment into line.

391. Deployment forward is always made fanwise. In column, to form line to the front: 1. **Line**, 2. **MARCH**. The leading platoon follows the captain, and the others move at an increased gait; the second to the right front, the third and fourth to the left front. When opposite their places in line, they move straight to the front.

If the squadron is marching at the gallop, the captain slackens his pace during the movement; the rear platoons extend the gallop.

392. If the captain wishes to deploy at any other gait, he commands: 1. **Line**, 2. (**Gait**), 3. **MARCH**, and regulates the movement of the leading platoon according to the object in view, or halts it if necessary. The rear platoons move up on the line at the gait ordered.

393. In case of absolute necessity, the squadron may attack before its deployment is complete; the platoons not in line attack in echelon.

394. To deploy in an oblique direction, the captain leads upon the new objective and, when the head of the column has moved at least the length of a platoon front in that direction, commands: 1. **Line**, 2. **MARCH**.

395. When the captain wishes to form line immediately toward the flank, he commands: 1. **Line to the right**, and rides to his position in the new line. At the command: 2. **MARCH**, the directing platoon follows the captain, the other platoons are led to

their positions in line abreast of it. Unless otherwise indicated, when the line is formed to the right, the third platoon in column becomes the directing platoon in line; when line is formed to the left, the second platoon in column becomes the directing platoon.

396. Line of platoon columns is a formation for march and maneuver. It has the advantage of placing the platoon leaders in front of the squadron, within reach of the captain; it gives the squadron a good formation for the approach to the attack, for moving over bad ground, and for deploying quickly under fire.

In this formation the platoon columns are in line at deploying intervals. The captain is 15 yards in front of the leader of the second platoon. The first sergeant is on the right of the file closer of the second platoon.

The intervals between the platoons may be increased or decreased according to the captain's indications; the platoons extend or close on the directing platoon unless otherwise indicated; when this interval is 6 yards the formation is called "**Mass.**"

397. Line of platoon columns can be taken from any formation. It maneuvers by the commands for the squadron in line; it obliques by heads of columns and forms column of squads to a flank. In obliquing or in moving by the flank or to the rear, the heads of platoon columns execute changes of direction. In moving to the rear, the heads of columns turn to the left.

398. The squadron in line to form line of platoon columns: 1. **Platoon columns**, 2. **MARCH**. The directing platoon follows the captain; the others regulate on it.

399. To form line from line of platoon columns: 1. **Line**, 2. **MARCH**, the directing platoon deploys and follows the captain; the others take their interval, if necessary, and deploy.

To form line in an oblique direction, the captain changes direction before ordering the deployment.

400. The squadron in column to form line of platoon columns: 1. **Line of platoon columns**, 2. **MARCH**. The first platoon forms column and follows the captain; the other platoons break from the column as in forming line and then form column and move to their places.

401. Being in line of platoon columns to form column: 1. **Column** (or, **on such platoon, column**), 2. **MARCH**. The directing platoon follows the captain, or goes in the indicated direction and forms line as soon as it has cleared; the other platoons follow, and each, as soon as it has cleared, forms line.

402. Route column is a formation in which the platoons are placed one behind the other, each in column of squads, half-squads, or files.

As a rule the captain marches at the head of the column, the leader of the first platoon on his left, followed by the first sergeant and a trumpeter; all distances are 4 feet. Except in the rear platoon, the leaders ride in front and the file closers in rear. In the rear platoon the file closer rides at the head and the leader in rear. This formation is taken at the command: 1. **Column of squads (half-squads, or files) or, On such platoon, column of squads (half-squads, or files), 2. MARCH.** The directing platoon breaks forward; the others enter the column so that the two right and the two left platoons follow each other. The leaders of the rear platoons follow the file closers of the preceding platoons, except at the command: **CLOSE INTO THE INTERVALS**, when the platoon leader of each rear platoon rides on the left of the file closer of the preceding platoon.

403. To march the route column to the rear, the captain commands: 1. **To the rear, 2. MARCH.** Each platoon executes a left about.

404. The route column is deployed in all directions according to the same principles as the squadron column.

Each platoon follows its leader and forms line behind him at his indication.

When practicable, the formation of squadron line directly from route column should be avoided; it is better to pass first to column or line of platoon columns.

405. To form column from route column: 1. **Column, 2. MARCH.** The leader of the leading platoon forms his platoon in line; the other platoons form line successively when they arrive at the place that they are to occupy in the column.

The charge.

406. The principles for the platoon apply. The normal formation for the charge is line, but it may be made in column.

407. Marching at the gallop, at the command: 1. **To attack,** the squadron takes the extended gallop and closes on the captain, who takes position on the left of the leader of the directing platoon. When at about 50 yards from the enemy the captain commands: 2. **CHARGE**, which is repeated by the platoon leaders and the troopers.

408. In instruction the enemy must always be outlined or represented by troopers, who may carry flags, under command of an officer or noncommissioned officer. In the beginning of this instruction these men will occupy fixed positions; later they will be instructed to ride so as to represent the movements of an aggressive enemy. The captain will explain to the commander the object of the exercise and tell him what to do.

409. To combine a flank attack with the direct attack, the captain designates a flank platoon: 1. **First (or fourth) platoon,** 2. **FLANK ATTACK.** The designated platoon at once moves out and is conducted so as to best fall opportunely upon the enemy's flank.

410. If the captain wishes to guard against a flank attack or an enveloping attack, he detaches a flank platoon to move to the menaced flank and to march somewhat in rear or in advance on that flank, ready to take an enveloping attack in flank or to meet a flank attack.

The movement is executed upon the command: 1. **First (or fourth) platoon,** 2. **FLANK GUARD,** or 2. **FLANK GUARD FORWARD.**

411. While, as a rule, cavalry in attack should always have a reserve, a platoon is never kept in rear except when the captain so directs.

EXTENDED ORDER.

412. Extended order may be taken from any formation. The principles for the squadron are the same as those for the platoon. The captain, accompanied by the first sergeant and a trumpeter, goes wherever necessary. Extended order by platoons may be taken: (a) In line, with the directing platoon somewhat in advance of the others; or (b) in depth, by successive platoons.

(a) 1. **Line of platoons (or on such platoon, line of platoons),** 2. **MARCH.**

(b) 1. **Platoons (or on such platoon),** 2. **At (so many) yards distance,** 3. **MARCH.** The extension in depth is made on the directing platoon (or the platoon designated). Care must be taken by the platoon leaders not to increase the distance prescribed. The captain indicates to the directing platoon the objective, gait, and formation; the others take the formation ordered by the captain or follow the example of the directing platoon. During the march the leaders may, when necessary, alter their formation.

Foragers.

413. The squadron is extended as foragers by the same commands and means as the platoon. The captain may add to the first command: **On (such) platoon.** The directing (or designated) platoon deploys as soon as it has the space. The other platoons take their intervals, and each deploys on its center.

414. In extended order in line the directing platoon is 12 yards in advance of the others.

415. When the squadron is alone, a platoon should be held in reserve in close order for emergencies or to provide a base for rallying or assembling.

When a charge as foragers is combined with a charge in line, the foragers should be rapidly rallied to a flank to unmask the charge in line which follows.

The line of foragers must be exercised in moving to the rear and by the flank, and must be able to rally promptly behind its leader so as to attack in line.

Scouts—Combat patrols.

416. The squadron in its maneuvers must be frequently practiced in sending out ground scouts and combat patrols.

Where very bad ground is to be crossed the ground scouts should be under a noncommissioned officer.

One or more platoons may be detached for scouting. The captain remains with the body of the squadron.

In each platoon scouts and a combat patrol must be ready to start immediately upon order of the captain.

The rally.

417. The rally is in line, and is made from any formation. At the command: **RALLY**, the platoon leaders rally their platoons while moving at the gallop toward the captain. The troopers form in double rank in rear of their platoon leaders. The first platoon to arrive forms in rear of the captain and becomes the directing platoon; the others form to right and left without regard to normal order. If there is not room for a platoon to come up on the line, it may remain in echelon.

The rally may be resorted to from any formation where the regular method of forming line would be slow or difficult.

The assembly.

418. The squadron mounted is assembled in squadron column. **ASSEMBLE:** Each platoon leader assembles his platoon in line, and then leads it into the column behind the captain. The platoons take place in column in the normal order, or as the captain may direct.

Squadron exercises.

419. The squadron must be exercised in:

- (a) Marching and deploying at the *extended* gallop.
- (b) Executing change of formation while executing change of direction.
- (c) Passing from one formation to another before the first is completed.
- (d) Ploying and deploying, including closing or extending intervals without gaining ground to the front, for concealment or to prepare for a sudden attack.
- (e) Attacking infantry and artillery in extended order, and in rallying and assembling rapidly from extended order.
- (f) Making short movements by fours to the flank and to the rear.
- (g) Rapid separation of the platoons to diminish effect of artillery fire.
- (h) Crossing fire-swept zones in appropriate formations.
- (i) Dismounted combat.

TO FIGHT ON FOOT.

420. The squadron when alone always leaves a sufficient mounted guard with the led horses to insure their safety and to keep touch with the squadron. When part of a larger unit, the superior commander gives directions as to the mounted guard. The led horses should be kept under cover, assembled by squadron, or in rear of their respective platoons.

421. The captain proceeds, with the other officers and the first sergeant, to reconnoiter. On the offensive the captain indicates to each platoon its objective. On the defensive he indicates the points to be held.

The captain, having completed his reconnaissance, moves the squadron as near to the dismounted position as a consideration of all the circumstances will permit, designates the guard for the led

horses and gives instructions to its commander and dismounts the squadron by the commands and means prescribed in the school of the platoon.

The horses of the captain and his trumpeter are held by a trumpeter from the ranks who remains mounted. The first sergeant remains with the led horses unless directed by the captain to accompany the squadron. When necessary, the captain may designate a mounted reserve.

The advance.

422. If necessary for the squadron to advance a considerable distance into an engagement (whether for attack or defense) it moves in close order, preferably column of squads, until the probability of encountering hostile fire makes it advisable to deploy. After deployment, and before opening fire, the advance of the squadron may be continued in skirmish line or other suitable formation, depending upon circumstances. The advance may often be facilitated, or better advantage taken of cover, or losses reduced by the employment of the *line of platoon columns* (or line of squads) or by the use of a *succession of thin lines*. The selection of the method to be used is made by the captain, the choice depending upon conditions arising during the progress of the advance. If the deployment is found to be premature, it will generally be best to assemble the squadron and proceed in close order.

Patrols are used to provide the necessary security against surprise.

Platoon columns are profitably used where the ground is so difficult or cover so limited as to make it desirable to take advantage of the few favorable routes; no two platoons should march within the area of burst of a single shrapnel. *Lines of squads in column of files* are of value principally in facilitating the advance over rough or brush-grown ground; they afford no material advantage in securing cover.

The advance in a succession of thin lines is used to cross a wide stretch swept, or likely to be swept, by artillery fire or heavy, long-range fire which can not profitably be returned. Its purpose is the building up of a strong skirmish line preparatory to engaging in a fire fight. This method of advancing offers a less definite target, hence is less likely to draw fire.

The above are suggestions. Other and better formations may be devised to fit particular cases. The best formation is the one which advances the line farthest with the least loss of men, time, and control.

The fire attack.

423. The principles governing the advance of the firing line in attack are considered in the School of the Regiment.

When it becomes impracticable for the squadron to advance as a whole by ordinary means, it advances by rushes.

424. Being in skirmish line: 1. **By platoon (squad) from the right, 2. RUSH.**

The platoon leader on the indicated flank carefully arranges the details for a prompt and vigorous execution of the rush and puts it into effect as soon as practicable. When about to rush, he causes the men of the fraction to cease firing and to hold themselves flat, but in readiness to spring forward instantly. The leader of the rush (at the signal) commands: **FOLLOW ME**, and, running at top speed, leads the fraction to the new line, where he halts and opens fire. The leader of the rush selects the new line, if it has not been previously designated.

The first fraction having established itself on the new line, the next like fraction is led or sent forward by its platoon leader, without further command of the captain, and so on, successively, until the entire squadron is on the line established by the first rush.

In an advance by rushes, leaders of troops in firing positions are responsible for the delivery of heavy fire to cover the advance of each rushing fraction. Troops are trained to change slightly the direction of fire, so as not to endanger the flanks of advanced portions of the firing line.

When the squadron forms a part of the firing line, the rush of the squadron as a whole is conducted by the captain, as described for a platoon in the preceding paragraph. The captain leads the rush; platoon leaders lead their respective platoons; during the rush the sergeants follow the line to insure prompt and orderly execution of the advance.

When the foregoing method of rushing, by running, becomes impracticable, any method of advance that *carries the attack closer to the enemy*, such as crawling, should be employed.

The squadron in support.

425. To enable it to follow and reach the firing line, the support adopts suitable formations, following the principles heretofore explained.

The support should be kept assembled as long as practicable. If after deploying a favorable opportunity arises to hold it for

some time in close formation, it should be reassembled. It is redeployed when necessary.

The movements of the support as a whole and the dispatch of reinforcements from it to the firing line are controlled by the colonel.

A reenforcement of less than one platoon has little influence, and will be avoided whenever practicable.

The captain of a squadron in support is constantly on the alert for the colonel's commands.

426. A reenforcement sent to the firing line joins it deployed as skirmishers. The leader of the reenforcement places it in an interval in the line, if one exists, and commands it thereafter as a unit. If no such suitable interval exists, the reenforcement is advanced with increased intervals between skirmishers; each man occupies the nearest interval in the firing line, and each then obeys the orders of the nearest squad leader and platoon leader.

A reenforcement joins the firing line as quickly as possible without exhausting the men. It may be utilized to send forward additional ammunition.

427. The original platoon division of the squadron in the firing line should be maintained, and should be broken up by the mingling of reinforcements only when this is unavoidable.

Upon joining the firing line, officers and sergeants accompanying a reenforcement take over the duties of others of like grade who have been disabled, or distribute themselves so as best to exercise their normal functions. Conditions will vary, and no rules can be prescribed. It is essential that all assist in mastering the increasing difficulties of control.

The squadron acting alone.

428. In general, the squadron, when acting alone, is employed according to the principles applicable to the regiment acting alone; the captain employs platoons as the colonel employs squadrons, making due allowance for the difference in strength.

The support may be smaller in proportion, or may be dispensed with.

429. The squadron must be well protected against surprise. Combat patrols on the flanks are specially important. Each leader of a flank platoon details a man to watch for the signals of the patrol or patrols on his flank.

FIRE.

430. Ordinarily rifles are loaded and extra ammunition, if required, is issued before the squadron deploys for combat.

In close order the squadron executes the firings at the command of the captain, who posts himself in rear of the center.

Firings in close order will be exceptional.

When the squadron is deployed, the men execute the firings at the command of their platoon leaders; the latter give such commands as are necessary to carry out the captain's directions, and, from time to time, add such further commands as are necessary to continue, correct, and control the fire ordered.

The voice is generally inadequate for giving commands during fire, and must be replaced by signals of such character that proper fire direction and control are assured. To attract attention, signals must usually be preceded by the whistle signal (short blast). A fraction of the firing line about to rush should, if practicable, avoid using the long blast signal as an aid to *cease firing*. Officers and men behind the firing line can not ordinarily move freely along the line, but each must depend on the others' watchfulness, in addition to his own, and make proper use of the prescribed signals. All should place themselves so as to see their immediate superiors and subordinates.

The file closers assist by observing the enemy, the target, and the fire effect, and by watching for and transmitting commands.

Firing with blank cartridges at an *outlined* or *represented* enemy at distances less than 100 yards is prohibited.

The effect of fire and the influence of the ground in relation thereto, and the individual and collective instruction in marksmanship, are treated in the Small-Arms Firing Manual.

Ranges.

431. For convenience of reference ranges are classified as follow:

0 to 600 yards, close range.

600 to 1,200 yards, effective range.

1,200 to 2,000 yards, long range.

over 2,000 yards, distant range.

432. The distance to the target must be determined as accurately as possible and the sights set accordingly. Aside from training and morale, this is the most important single factor in securing effective fire at the longer ranges.

Except in a deliberately prepared defensive position, the most accurate and only practicable method of determining the range will generally be to take the mean of several estimates, made independently.

Five or six officers or men, selected from the most accurate estimators in the squadron, are designated as *range finders* and are specially trained in estimating distances.

Whenever necessary and practicable, the captain assembles the range finders, points out the target to them, and adopts the mean of their estimates. The range finders then take their customary posts.

Classes of fire.

433. *Volley fire* has limited application. It has a moral effect, both on the troops employing it and those subjected to it. It may be employed to restore control. In defense it may be used in the early stages of the action if the enemy presents a large, compact target. It may be used by troops specially posted on the flank or in a dominant position in rear of an attacking force for the purpose of aiding the advance by *fire of position*. When the ground near the target is such that the strike of bullets can be seen from the firing line, *ranging volleys* may be used to correct the sight setting.

In combat, volley firing is executed habitually by platoon.

Fire at will is the class of fire normally employed in attack or defense.

Clip fire has limited application. It is principally used: (a) In the early stages of combat, to steady the men by habituating them to brief pauses in firing; (b) to produce a short burst of fire.

The target.

434. Ordinarily the colonel will assign to the squadron an objective in attack or sector in defense; the squadron's target will lie within the limits so assigned. In the choice of target, tactical considerations are paramount; the nearest hostile troops within the objective or sector will thus be the usual target. This will ordinarily be the hostile firing line; troops in rear are ordinarily proper targets for artillery, machine guns, or, at times, troops employing fire of position.

Change of target should not be made without excellent reasons therefor, such as the sudden appearance of hostile troops under conditions which make them more to be feared than the troops comprising the former target.

435. The distribution of fire over the entire target is of special importance.

The captain allots a part of the target to each platoon, or each platoon leader takes as his target that part which corresponds to his position in the squadron. Men are so instructed that each fires on that part of the target which is directly opposite him.

All parts of the target are equally important. Care must be exercised that the men do not slight its less visible parts. A section of the target not covered by fire represents a number of the enemy permitted to fire coolly and effectively.

Fire direction.

436. It is impracticable for the captain to command the squadron directly in combat. His efficiency in managing the firing line is measured by his ability to enforce his will through the platoon leaders. Having indicated clearly what he desires them to do, he avoids interfering except to correct serious errors or omissions.

437. The captain *directs* the fire of the squadron or of designated platoons. He designates the target, and, when practicable, allots a part of the target to each platoon. Before beginning the fire action he determines the range, announces the sight setting, and indicates the class of fire to be employed and the time to open fire. Thereafter, he observes the fire effect, corrects material errors in sight setting, prevents exhaustion of the ammunition supply, and causes the distribution of such extra ammunition as may be received from the rear.

Fire control.

438. In combat the platoon is the *fire unit*. From 20 to 35 rifles are as many as one leader can control effectively.

Each platoon leader puts into execution the commands or directions of the captain, having first taken such precautions to insure correct sight setting and clear description of the target or aiming point as the situation permits or requires; thereafter he gives such additional commands or directions as are necessary to exact compliance with the captain's will. He corrects the sight setting when necessary. He designates an aiming point when the target can not be seen with the naked eye.

In general, *platoon leaders* observe the target and the effect of their fire and are on the alert for the captain's commands; they observe and regulate the rate of fire. The *file closers* watch the

firing line and check every breach of fire discipline. *Squad leaders* transmit commands when necessary, observe the conduct of their squads and abate excitement, assist in enforcing fire discipline, and participate in the firing.

439. The best troops are those that submit longest to fire control. Loss of control is an evil which robs success of its greatest results. To avoid or delay such loss should be the constant aim of all.

Fire control implies the ability to stop firing, change the sight setting and target, and resume a well-directed fire.

Fire discipline.

440. "Fire discipline implies, besides a habit of obedience, a control of the rifle by the soldier, the result of training, which will enable him in action to make hits instead of misses. It embraces taking advantage of the ground; care in setting the sight and delivery of fire; constant attention to the orders of the leaders, and careful observation of the enemy; an increase of fire when the target is favorable, and a cessation of fire when the enemy disappears; economy of ammunition." (Small-Arms Firing Manual.)

In combat, shots which graze the enemy's trench or position, and thus reduce the effectiveness of his fire, have the approximate value of hits; such shots only, or actual hits, contribute toward fire superiority.

Fire discipline implies that, in a firing line without leaders, each man retains his presence of mind and directs effective fire upon the proper target.

441. To create a correct appreciation of the requirements of fire discipline, men are taught that the rate of fire should be as rapid as is consistent with accurate aiming; that the rate will depend upon the visibility, proximity, and size of the target; and that the proper rate will ordinarily suggest itself to each trained man, usually rendering cautions or commands unnecessary.

In attack the highest rate of fire is employed at the halt preceding the assault, and in pursuing fire.

442. In defense, when the target disappears behind cover, platoon leaders suspend fire, prepare their platoons to fire upon the point where it is expected to reappear, and greet its reappearance instantly with vigorous fire.

443. For communication between the firing line and the reserve or commander in rear, the subjoined signals (Signal Code) are pre-

scribed. In transmission their concealment from the enemy's view should be insured. In the absence of signal flags, the headdress or other substitute may be used.

Letter of alphabet.	If signaled from the rear to the firing line.	If signaled from the firing line to the rear.
aaa.....	Ammunition going forward.....	Ammunition required.
ccc.....	Charge (mandatory at all times).....	Am about to charge if no instructions to contrary.
sss.....	Support going forward.....	Support needed.
o.....	Move forward.....	Preparing to move forward.
hhh.....	Halt.....	
n.....	Negative.....	Negative.
y.....	Affirmative.....	Affirmative.

The rally.

444. The rally is executed by platoon at command of the captain, as already prescribed.

To mount.

445. The platoons mount simultaneously, or as nearly as practicable, under the protection of the reserve; one platoon may be left dismounted to cover the retreat of the others to their horses.

At the command: **MOUNT** (or **SUCH PLATOONS MOUNT**), all the platoons or those designated mount and form in rear of the captain in the formation he indicates. The reserve takes up the pursuit or covers the retreat.

EMPLOYMENT OF THE SQUADRON.

446. The captain must cultivate the special abilities and utilize the characteristics of his officers and noncommissioned officers. He must encourage each in the exercise of the initiative pertaining to his position.

The squadron, acting alone, may be employed to explore, to support a reconnaissance, to seize a position, etc. It moves by a succession of rapid advances. It must protect itself by detachments and always retain its liberty of action. Its best guaranty of safety lies in its *mobility*.

In combat the captain may effect various combinations with his platoons; as, for example, he may attack with one platoon and maneuver with the others.

The squadron in the regiment charges or attacks dismounted by the same means and according to the same principles as when alone,

except that it does not have a support or reserve unless so ordered by the colonel. Combat patrols are sent out by flank squadrons only. A squadron may be employed for a flank attack or as a flank guard. It reconnoiters positions or covers troops in menaced directions, in which latter case one or more platoons are detached as scouts. It furnishes advance guards, rear guards, advance posts, flank guards, and artillery supports, and may be employed as regimental reserve.

447. The normal formation for attack against Cavalry is line in double rank. The charge may be made in column to break through at some point or when lack of time or space prevents forming line.

448. In attacking Infantry the squadron should be formed in single rank or in extended order. Opportunity should be sought for a flank attack. If the frontal attack is necessary, the fire-swept zone should be crossed at a rapid gait; the pace should be increased as the enemy's line is approached. The line in extended order of groups may be maneuvered so that the groups will converge in the attack, thus causing a dispersion of the enemy's fire.

In attacking dismounted Cavalry, seek out and attack the led horses.

449. Artillery may be attacked in march or in position. If in march, part of the squadron attacks the support and the remainder the carriages. If the Artillery is in position, the attack is directed against its flank. The captain gives to each platoon its special mission; as, for example, one platoon as foragers against the pieces and the teams, while the others attack the support, etc.

450. Dismounted action is resorted to when success through mounted action seems improbable, and—

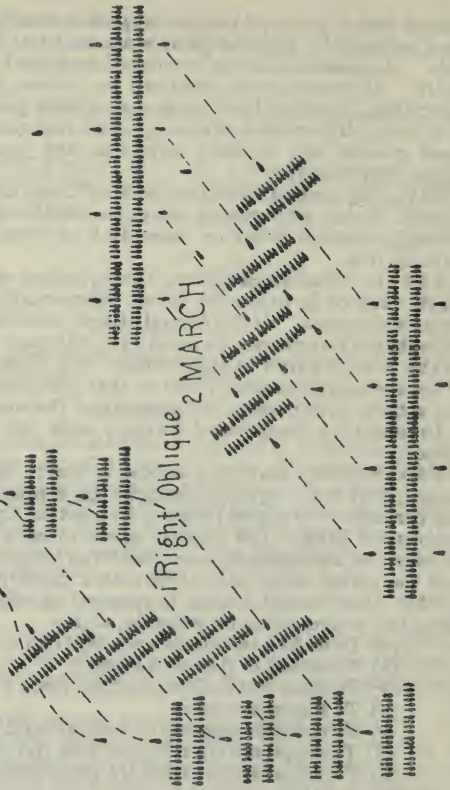
- (a) To make a reconnaissance that can not be made mounted.
- (b) To attack or defend a camp.
- (c) To seize and hold a position, force a passage, etc.
- (d) To harass a column.
- (e) To cover an assembly; hold an exit.
- (f) To cooperate by rifle fire with the other arms.
- (g) To make a fire attack in combination with a mounted attack.

THE SQUADRON, DISMOUNTED.

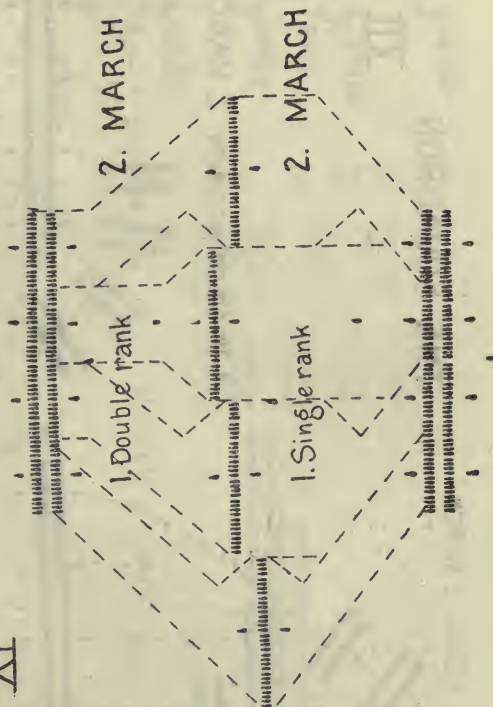
451. The commands and movements for the squadron, dismounted, are the same as for the squadron mounted, except as indicated in the school of the platoon.

THE SQUADRON

X



THE SQUADRON.

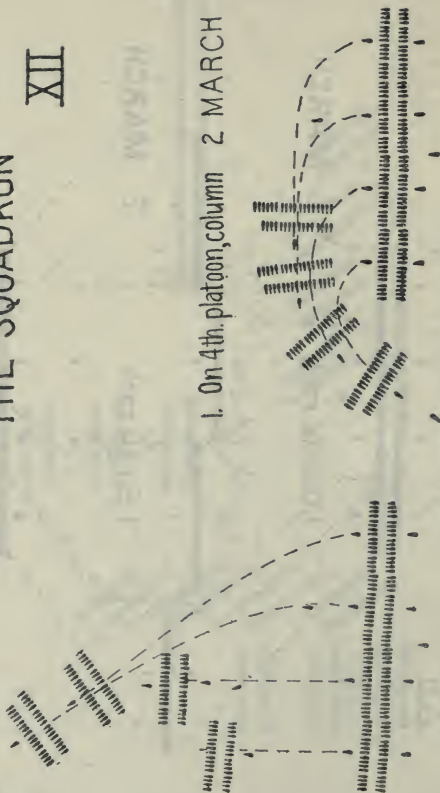


1 Column 2 MARCH

THE SQUADRON

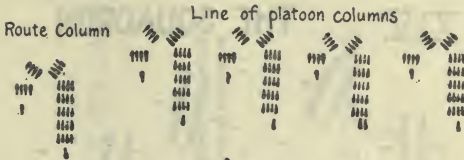
XII

1. On 4th. platoon, column 2 MARCH

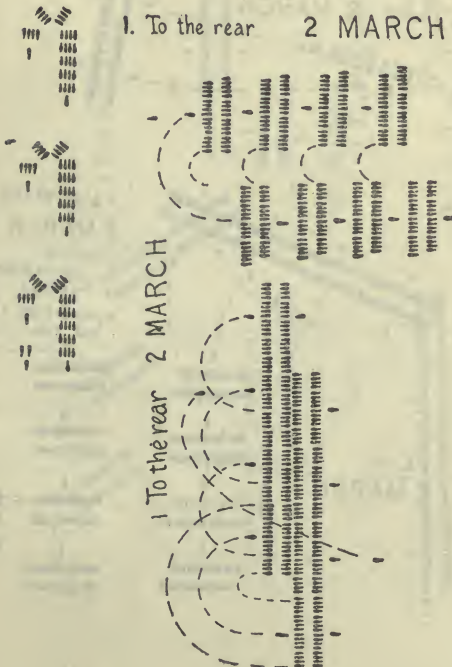


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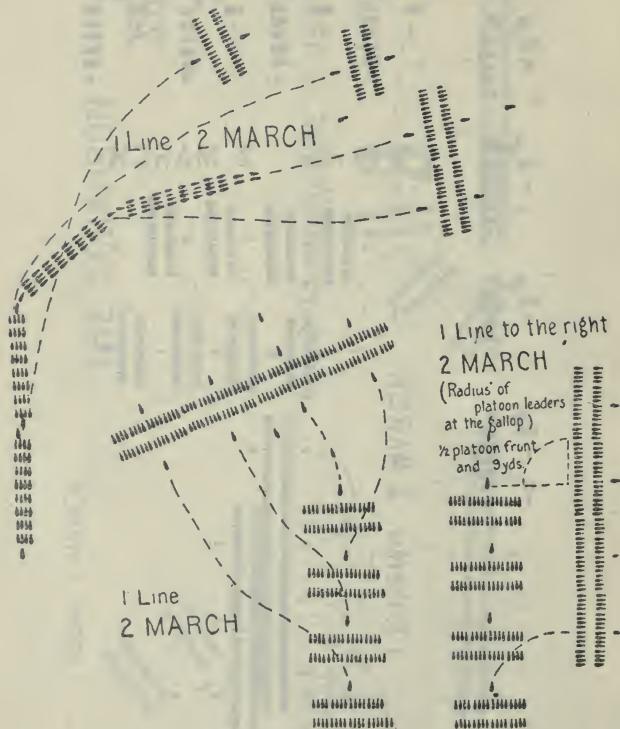


1. To the rear 2 MARCH



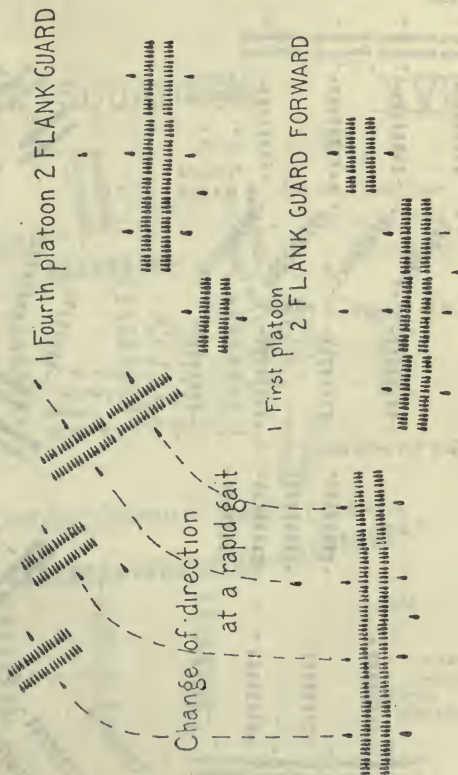
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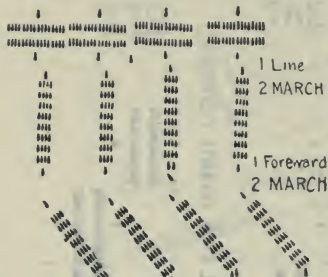
THE SQUADRON

XV



XVI

THE SQUADRON



1 Left Oblique 2 MARCH

Take full intervals

Mass

1 Line of
platoon
columns
2 MARCH

1 Line of
platoon
Columns
2 MARCH

1 Line 2 MARCH

1 Right oblique 2 MARCH

1 Column 2 MARCH

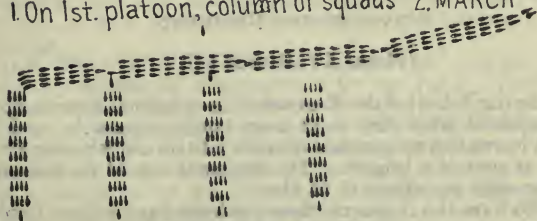
THE SQUADRON

XVII

RALLY



1. On 1st. platoon, column of squads 2. MARCH



THE REGIMENT.

THE COMPOSITION OF THE REGIMENT.

452. The regiment is composed of six squadrons and a machine-gun unit. The instruction prescribed is applicable to a less number of squadrons.

For purposes of maneuver the regiment is divided into half-regiments; when there is an odd number of squadrons the center squadron is assigned to the right half-regiment. If there are only three squadrons, the regiment is nevertheless divided into half-regiments. Majors are assigned to command of half-regiments when the regiment is in echelon of half-regiments or when half-regiments are detached.

The instructions for the use of the machine guns and for training machine-gun units are prescribed in the Machine Gun Regulations.

When the machine-gun unit is with the regiment its position in line, line of columns, or line in extended order will be in rear of the center or in such position as the colonel may direct. In column the machine-gun unit is in rear. In campaign the machine-gun unit will be employed as set forth in Machine Gun Regulations and in Employment of Cavalry.

SCHOOL OF THE REGIMENT.

(Plates XVIII to XXII.)

453. In the School of the Regiment the squadrons learn to apply in the regiment what they have been taught separately, and the regiment learns the movements necessary to its use whether acting alone or as part of a brigade. The regiment should be trained to maneuver with squadrons of 64 files.

454. To form the regiment, the squadrons having been formed, the colonel commands: **FORM REGIMENT.**

The regiment forms in column of platoons in rear of the colonel, the adjutant assisting in the formation. If the colonel wishes to assemble the regiment in any other formation, he indicates it in the command.

The squadrons have a fixed place in the regiment only when it is first assembled, but as a rule the squadrons of the same half-regiment remain together.

They are numbered from right to left in line and from front to rear in column. The same rule applies to the half-regiments.

To dismiss the regiment, the colonel commands: **DISMISS YOUR SQUADRONS.**

455. The colonel is the leader of the regiment. The directing squadron follows him. In line the directing squadron is the center or right center squadron. The colonel may, however, designate any squadron as the directing squadron. In column or in echelon the leading squadron is the directing squadron. The captain of the directing squadron follows the colonel at a distance of 30 yards. The other captains regulate on him. The colonel, when he does not wish to act as leader, is free to go where he considers it expedient to be; in such case his place is taken by a field officer, or the colonel may indicate to the captain of the directing squadron the direction and the gait to be taken.

The lieutenant colonel is 15 yards in rear of the colonel; the adjutant is 2 yards on the left of the colonel; the sergeant major and chief trumpeter are 2 yards behind the colonel and adjutant and act as messengers. In line the majors are in front of the centers of their wings on a line with the lieutenant colonel; in column they are on the left and abreast of their leading units 4 yards from the column. The majors and captains are permitted to approach the colonel to hear and transmit his orders, the captains leaving the conduct of their squadrons meanwhile to the leaders of the base platoons.

456. The colonel regulates the direction and gait and gives his orders by signals, by messenger, or by the voice. Trumpet calls are used exceptionally, and then only when the regiment is alone. Sabers are drawn and returned upon indication of the colonel.

To attract the attention of his captains, give his orders, or become independent in his movements, the colonel conforms to the principles prescribed for the captain in the school of the squadron.

The majors supervise the movements in their half-regiment. They give commands only when necessary, and repeat the colonel's commands only when these have not been understood.

When the colonel raises his arm (or his saber) the captains do likewise and place themselves so as to understand the command and transmit it to their squadrons.

Although the colonel gives his commands to all the squadrons, the squadrons execute them only at the command of their captains.

457. *Officers must be frequently practiced in commanding a unit greater than that pertaining to their grade.*

458. If the colonel wishes to execute simultaneously movements of the squadrons or half-regiments not otherwise provided for, he gives the preliminary command: 1. **Squadrons**, or 1. **Half-regiments**; as for example, 1. **Squadrons**, 2. **Incline to the right**, 3. **M RCH**. Where a command refers to a half-regiment, the captains will wait for the command of the major.

459. Movements prescribed for the squadron may be executed by the regiment, unless special provision is herein made. In all formations and movements of the regiment the captains conform to the principles laid down for the platoon leaders in the School of the Squadron.

460. The regiment, from any formation, faces or gains ground to a flank by forming column of platoons to the flank, or by turning by platoon.

461. At the command: 1. **To the rear**, 2. **M RCH**, each platoon executes a left about. At the command: 1. **Right oblique**, 2. **M RCH**, each platoon executes right half turn, or, if in platoon column, executes column half right.

462. *The captains must bear in mind the vital importance of order and cohesion.* Perfect regularity in the gaits is indispensable.

REGIMENTAL FORMATIONS.

- (a) Line.
- (b) Line of columns.
- (c) Mass.
- (d) Column of platoons.
- (e) Double column.
- (f) Echelon.
- (g) Route column.
- (h) Extended order.

Line.

463. Line is the formation for attack against Cavalry. The squadrons are placed as indicated in the accompanying plates.

Although the squadrons are slightly echeloned to avoid crowding and give flexibility, this formation is called a line.

464. In marching in line, the captains lead their squadrons so as to maintain their interval and distance.

In order to preserve cohesion in the attack, the echelon distance of 12 yards and the interval of 6 yards between squadrons are the extreme limits, which may be diminished but should never be increased.

Errors in direction or in distance should be corrected gradually.

465. To make a slight change of direction in the march of the regiment in line, the colonel leads in the new direction, followed by the directing squadron. The other squadrons take a parallel direction and resume their places as soon as possible.

The regiment should be frequently exercised in executing these changes of direction while moving in line at a gallop.

If it is desired to execute a complete change of front, at right angles to the former direction, the colonel commands: **RALLY**, and rides rapidly to the new front. The captains conduct their squadrons at a gallop to the new line.

Line of columns.

466. The squadron columns, with deploying intervals, are parallel, with the heads echeloned at 12 yards.

The line of column is a maneuver formation and is used for an approach preceding a deployment.

This disposition of the squadrons facilitates the handling of the regiment and the rapid formation of line.

The squadrons may vary their intervals in order to conform to the terrain or to avoid the fire of the enemy. They should regain their regular intervals, however, when a deployment is imminent.

The regiment in line, the colonel commands: 1. **Line of columns**, 2. **MARCH**.

Line is formed by the command: 1. **Line**, 2. **MARCH**.

467. In case of surprise on a flank, the squadron nearest the enemy faces toward him and engages at once; the other squadrons, as soon as possible.

Mass.

468. Mass is a formation for concentration in a position of readiness. Beyond the zone of the enemy's fire, it may be used as a formation for marching, under cover of an advance guard.

In this formation, the squadron columns are parallel, their heads on the same line with intervals of 12 yards.

On account of its great vulnerability, mass should not be used in the approach; as soon as troops in mass enter the dangerous zone, they should open out.

In order to pass from line or from line of columns into mass, the colonel commands: 1. **Mass**, or on (such) squadron, **mass**, 2. **MARCH**.

Line of columns is formed from mass by the command: 1. **Line of columns, or on (such) squadron, line of columns,** 2. **MARCH.** The deployment is made on the same principles as in the squadron (fanwise). The second and third squadrons form on the right of the first.

The column of platoons.

469. Column of platoons is a formation for march and maneuver. In this order the squadron columns follow each other at a distance of 12 yards. The captain of the first squadron is 15 yards in front of the leader of the first platoon. The other captains are on the right of the leaders of their first platoons. To avoid checks on the march the distance between squadrons may be reduced, and squadron commanders are further authorized to uncover and overlap the preceding squadron temporarily.

The regiment being in line, in line of columns or in mass, to break into column of platoons, the colonel commands: 1. **Column, or on (such) squadron column,** 2. **MARCH.** The regiment breaks into column behind the directing or designated squadron.

Deployment of the column of platoons.

470. The column of platoons is formed to the front in mass, or in line of columns, or in line on the leading squadron, by the command: 1. **Mass (or Line of columns, or line),** 2. **MARCH.**

471. To form mass to the right: 1. **Mass to the right,** 2. **MARCH.** The leading squadron changes direction to the right; the rear squadrons change direction successively so as to place themselves on the right of the first.

To form line of columns to the right: 1. **Line of columns to the right,** 2. **MARCH.**

To form line to the right: 1. **Line to the right,** 2. **MARCH.** Each squadron forms line to the right and takes its place.

The double column.

472. The double column is composed of two parallel columns of platoons with an interval of 6 yards. The two leading squadrons are abreast of each other and each is followed in column by the other squadrons of the half-regiment to which it belongs.

The regiment being in line, in line of columns, in mass or in column of platoons, to form double column: 1. **Double column**, 2. **MARCH**. From line the center and left center squadrons advance in column of platoons and each is followed by the other squadrons of its half-regiment. The squadron columns in each half-regiment are moved by the shortest line to their places in column.

From line of columns or mass the center and left center squadrons advance and the interval is closed on the center (right center) squadron.

From column of platoons the squadrons of the second (rear) half-regiment are led to their places in column on the left of the right (leading) half-regiment.

The distance between squadrons is the same as in regimental column of platoons.

The leading squadron of the right column is the directing squadron.

The colonel is 30 yards in advance of the captain of the directing squadron. The lieutenant colonel is 15 yards in rear of the colonel. The majors are on a line with the lieutenant colonel and in front of the outer flanks of the leading platoons of their respective half-regiments.

Deployment of the double column.

473. The double column is formed in mass, line of columns, line of platoon columns, or line to the front by the command: 1. **Mass** (line of columns, line of platoon columns, or line), 2. **MARCH**. The deployment of each half-regiment is made toward its outer flank on the leading squadron. The leading squadron of the left half-regiment gains ground to the left and each squadron forms fanwise.

474. To form line, line of platoon columns, line of columns, or mass to the flank: 1. **Line** (line of platoon columns, line of columns, or mass), to the right, 2. **MARCH**. The right squadrons form to the right on the directing squadron. The first two squadrons of the left half-regiment form successively on the left of the right half-regiment; the third forms on the right.

475. To march the double column to the rear: 1. **To the rear**, 2. **MARCH**. The platoons turn to the left about.

476. To change direction, the colonel indicates the new direction, or commands: 1. **Column right** (half right); or 1. **Incline to the right**, 2. **MARCH**. The double column changes direction, regulating on the directing squadron.

The echelon.

477. The regiment forms echelon of squadrons on the center or on a flank squadron, or echelon of half-regiments.

Echelon formation permits advancing a wing to overlap the enemy, at the same time remaining ready to face him at any instant or to avoid envelopment by refusing a flank.

The intervals and distances are such as to enable the echelons to be faced to a flank and retain the echelon formation, but the colonel may increase or diminish them.

478. The regiment is formed in echelon from any line formation by the command: 1. *On (such unit) in echelon*, 2. **MARCH**. From column: 1. *By the right in echelon of squadrons (half-regiments)*, 2. **MARCH**.

This command determines the form of the echelon and the size of the units composing it.

The designated unit becomes the directing echelon and follows the commander, or moves in the direction indicated by him, without change of formation.

479. Being in echelon, to form line: 1. **Line**, 2. **MARCH**. Column is formed as from line formations.

The route column.

480. The regiment is formed in route column at the commands: 1. **Route column**, or *on (such) squadron, route column*, 2. **MARCH**. The directing squadron (or the squadron designated) breaks into route column behind the colonel; the others follow in route column at 12 yards. The leader of the rear platoon of each squadron rides in rear of the right file. To form column of platoons: 1. **Column of platoons**, 2. **MARCH**. The leading squadron forms column; the other squadrons close successively and then form column.

Line of platoon columns, or line or column of squadron masses.

481. In the different formations of the regiment, in line or in echelon, the squadrons may be formed in line of platoon columns or in squadron mass, or the regiment may be formed in column of squadron masses. In column of squadron masses the distance between squadrons is 12 yards, unless otherwise indicated by the

colonel. Officers and file closers reduce their distance from the ranks accordingly.

In line of platoon columns the squadrons are placed as in line formation; in line of squadron masses the squadrons in mass are at intervals of 12 yards.

The line of platoon columns (or the line of squadron masses) favors deployment to the front and is advantageous in utilizing the small folds of the terrain; however, it is not favorable to a deployment to a flank and is more vulnerable to artillery fire than line of squadron columns or extended and echeloned formations. The column of squadron masses is used for concentration in a sheltered position.

The regiment marching in line of platoon columns (or of squadron masses), ground may be gained to the right by the command: 1. Squadrons, right turn, 2. **MARCH**.

The rally.

482. The rally of the regiment is executed in line, according to the principles prescribed for the squadron.

The squadron first to arrive behind the colonel becomes the base squadron; the others place themselves to its right and left.

The assembly.

483. The assembly of the regiment is in mass and is executed at the command: **ASSEMBLE**, according to the principles prescribed for the squadron.

The charge.

484. The regiment executes the charge, conforming in a general manner to what is prescribed in the schools of the squadron and of the platoon.

The outlined enemy is placed under the direction of an officer.

485. The regiment marching in line, at the regulation gallop, sabers drawn, the colonel commands: **TO ATTACK**. The squadrons take the extended gallop and the directing squadron closes on the colonel, who takes position on the left of the captain. The officers and noncommissioned officers accompanying the colonel place themselves on his left. The other squadrons conform to the principles prescribed in the school of the squadron.

At the command: **CHARGE**, repeated by all the officers and men, the squadrons are launched straight to the front and charge home.

The command: **RALLY**, is repeated by the officers.

The squadrons are rallied in rear of the colonel.

The squadron nearest to the colonel becomes the nucleus of the rally. It is of the utmost importance at this moment of the action to form, as quickly as possible, a unit in compact order so as to make or parry a new attack.

EXTENDED ORDER.

486. The formation of the regiment least vulnerable to artillery fire is a line of columns or echelon of columns with large intervals, moving at a rapid gait.

To cross ground without cover and exposed to infantry fire, or to move from cover to cover, the colonel may throw forward the squadrons successively, in open order, the squadrons halting and re-forming behind each cover.

The colonel indicates to the squadrons the interval or the distance which must separate them, and to the directing squadron the objective, the gait, and the formation (which may be in extended order). The other squadrons follow the example of the directing squadron, but the captains may modify their formation according to circumstances.

This expedient of taking extended order should under no circumstances be employed if the regiment is menaced by an attack from cavalry.

REGIMENTAL EXERCISES.

487. The regiment should be exercised:

- (a) In moving and maneuvering at the extended gallop.
- (b) In executing change of formation combined with a change of direction.
- (c) In passing from one movement to another before the first is completed.
- (d) In plying or deploying, protected by cover, without regard to regulation formations, intervals, or distances, in such a manner as to remain concealed or to execute a sudden attack from behind a crest.

Such movements executed, if necessary, without gaining ground to the front, may be useful under special circumstances to economize time or space or to act by surprise.

(e) In crossing at an extended gallop, by platoons or squads, in single or double rank, ground assumed to be swept by fire, and in rallying at one or several points of cover selected in advance.

(f) In "filtering" in these formations across covered and wooded terrain and in rallying under these conditions.

(g) In rapid separation of squadrons to diminish effect of artillery fire.

(h) In dismounted combat.

(i) In the use of machine guns in combination with the regiment in its various methods of action.

DISMOUNTED ACTION.

488. The regiment acting alone engages the necessary number of squadrons; one or more squadrons may be held as a mounted reserve.

The regiment constitutes a force of sufficient size to be able to maneuver with success by combining to a certain extent fire action and mounted attack. The division into half-regiments lends itself to this combination.

The regiment, in connection with other troops, may be called upon to engage all its squadrons dismounted.

A guiding principle in dismounted action is that cavalry should employ its mobility to compensate for its relative lack of numbers.

Its power to break off the action in one place and resume it in another, to pass, at a favorable moment, from fire attack to mounted action, or to withdraw mounted, should never be lost sight of.

To attain the surprise and rapidity which should characterize, when possible, the dismounted attack of cavalry, the full strength of the firing line should be developed from the beginning of the attack.

Occasions will arise, however, when cavalry will have to drive home a determined attack on foot, and in such cases the principles governing the employment of fire action by infantry must control.

489. The reconnaissance is made by the colonel accompanied by the field officers and the machine-gun commander.

The troops to engage in the dismounted attack are taken, mounted, as near to the position to be occupied by the firing line

as a consideration of all the circumstances, including the safety of the led horses, will permit.

The led horses should be as near to their respective squadrons as safety from the fire and view of the enemy will permit. They should maintain their relative positions with reference to dismounted units, and be so faced as to permit of the quickest possible movements toward the dismounted line, and be under the effective protection of the reserve.

For this purpose the officer in charge will make the necessary dispositions, keeping constantly in touch with the commander of the dismounted line and making the necessary preparations for rapid movement of the led horses.

490. In extended order, dismounted, the squadron is the largest unit to execute movements by prescribed commands or means. The colonel, assembling his captains if practicable, directs the disposition of the regiment. He controls its subsequent movements by such orders or commands as are suitable to the occasion.

In every disposition of the regiment for dismounted combat the colonel should give subordinates sufficient information of the enemy, of the position of supporting and neighboring troops, and of the object sought to enable them to conform intelligently to the general plan.

The colonel should designate the squadrons which are to constitute the *firing line* and those which are to constitute the *support*. In attack he should designate the direction of the objective, the order and front of the squadrons on the attacking line, and the directing squadron.

In defense he should designate the front of each squadron and the sector to be observed by each.

491. When the regiment is operating alone the colonel provides for the reconnaissance and protection of his flanks: if part of a larger force, the colonel makes similar provision when necessary without orders from higher authority.

492. Long and fatiguing advances of the skirmish line are disorganizing and should be avoided, but it is a greater evil to bring the command mounted under heavy fire or to be caught by such fire while in dense columns or other close-order formation dismounted. Advantage should be taken of cover to effect the deployment as near the enemy as practicable.

493. The colonel regulates the depth of the deployment and the extent and density of the firing line, subject to such restrictions as

a senior may have imposed. Squadrons, or designated subdivisions and detachments, are conducted by their commanders in such manner as best to accomplish the mission assigned to them. Squadrons designated for the firing line dismount and march independently to the place of deployment, form skirmish line, and take up the advance. They conform in general to the directing squadron.

494. The commander of a regiment, whether acting alone or as part of a larger force, should hold a part of his command out of the firing line. By the judicious use of this force he can exert an influence over his firing line not otherwise possible and can control within reasonable limits an action once begun. He should deploy a sufficient number of squadrons on the firing line, retaining the remaining squadrons as a support for that line. The relative strength of the firing line and support will depend on the front to be covered and the anticipated severity of the action.

If the regiment be part of a larger command, the number of squadrons in the firing line will generally be determined from the brigade commander's order; the remainder constitutes the support. If the regiment is acting alone, the support must be strong enough to maintain the original fire power of the firing line, to protect the flanks, and to perform the functions of a reserve whatever be the issue of the action.

495. If the regiment is operating alone, the support may, according to circumstances, be held in one or two bodies and placed behind the center, or behind one or both flanks of the firing line, or echeloned beyond a flank.

If the regiment is part of a larger force, the support is generally held in one body.

The distance between the firing line and the supporting group or groups will vary between wide limits; it should be as short as the necessity for protection from heavy losses will permit. When cover is available, the support should be as close as 50 to 100 yards; when such cover is not available, it should not be closer than 300 yards. It may be as far as 500 yards in rear if good cover is there obtainable and is not obtainable at a lesser distance.

496. In exceptional cases, as in an unexpected encounter, it may be necessary to place an entire regiment or brigade in the firing line, the support being furnished by other troops. Such deployment causes the early mingling of the larger units, thus rendering leadership and control extremely difficult.

FIRE.

497. Fire direction and fire control are functions of squadron and platoon commanders. The colonel makes the primary apportionment of the target—in defense, by assigning sectors of fire; in attack, by assigning the objective. In the latter case each squadron in the firing line takes as its target that part of the general objective which lies in its front.

The colonel should indicate the point or time at which the fire fight is to open. He may do this in his order for deployment, or he may follow the firing line close enough to do so at the proper time. If it be impracticable for him to do either, each captain determines the time for opening fire.

THE ATTACK.

498. The regiment is the *attack unit*.

If his regiment be one of several in the firing line, the colonel, in executing his part of the attack, pushes his regiment forward as vigorously as possible within the front, or section, assigned to it. The great degree of independence allowed to him as to details demands, in turn, the exercise of good judgment on his part. Better leadership, better troops, and more favorable terrain enable one regiment to advance more rapidly in attack than another less fortunate, and such a regiment will insure the further advance of the others. The leading regiment should not, however, become isolated; isolation may lead to its destruction.

499. The deployment having been made, the firing line advances without firing. The predominant idea must be to close with the enemy as soon as possible without ruinous losses. The limited supply of ammunition and the uncertainty of resupply, the necessity for securing fire superiority in order to advance within the shorter ranges, and the impossibility of accomplishing this at ineffective ranges, make it imperative that fire be not opened as long as the advance can be continued without demoralizing losses. The attack which halts to open fire at long range (over 1,200 yards) is not likely ever to reach its destination. Every effort should be made, by using cover or inconspicuous formations, or by advancing the firing line as a whole, to arrive within 800 yards of the enemy before opening fire.

500. Except when the enemy's artillery is able to effect an unusual concentration of fire, its fire upon deployed dismounted troops causes losses which are unimportant when compared with those inflicted by his infantry; hence the attacking line should proceed, as described above, to a position from which an effective fire can be directed against the hostile infantry with a view to obtaining fire superiority. The effectiveness of the enemy's fire must be reduced so as to permit further advance. The more effective the fire to which the enemy is subjected the less effective will be his fire.

501. Occasionally the fire of adjacent regiments or of troops employing fire of position, or of supporting artillery, will permit the further advance of the entire firing line from this point, but it will generally be necessary to advance by rushes of fractions of the line.

The fraction making the rush should be as large as the hostile fire and the necessity for maintaining fire superiority will permit. Depending upon circumstances, the strength of the fraction may vary from a squadron to a few men.

The advance is made as rapidly as is possible without losing fire superiority. The smaller the fraction that rushes the greater the number of rifles that continue to fire upon the enemy. On the other hand, the smaller the fraction that rushes the slower will be the progress of the attack.

502. Enough rifles must continue in action to insure the success of each rush. Frequently the successive advances of the firing line must be effected by rushes of fractions of decreased size; that is, advances by rushes may first be made by squadron, later by platoon, and finally by squads or files; but no subsequent opportunity to *increase* the rate of advance, such as better cover or a decrease of the hostile fire, should be overlooked.

Whenever possible, the rush is begun by a flank fraction of the firing line. In the absence of express directions from the colonel, each captain of a flank squadron determines when an advance by rushes shall be attempted. A flank squadron which inaugurates an advance by rushes becomes the directing squadron. An advance by rushes having been inaugurated on one flank, the remainder of the firing line conforms; fractions rush successively from that flank and halt on the line established by the initial rush.

The fractions need not be uniform in size; each captain indi-

cates how his squadron shall rush, having due regard to the ground and the state of the fire fight.

A fraction about to rush is sent forward when the remainder of the line is firing vigorously; otherwise the chief advantage of this method of advancing is lost.

The length of the rush will vary from 30 to 80 yards, depending upon the existence of cover, positions for firing, and the hostile fire.

When the entire firing line of the regiment has advanced to the new line, fresh opportunities to advance are sought as before.

503. Two identical situations will never confront the regiment; hence at drill it is prohibited to arrange the details of an advance before the preceding one has been concluded or to employ a fixed or prearranged method of advancing by rushes.

504. The colonel posts himself so as best to direct the reenforcing of the firing line from the support. When all or nearly all of the support has been absorbed by the firing line, he joins, and takes full charge of the latter.

Reenforcing the firing line by dribblets of a squad or a few men has no appreciable effect. The firing line requires either no reinforcement or a strong one. Generally one or two platoons will be sent forward under cover of a heavy fire of the firing line.

505. To facilitate control and to provide intervals in which reenforcements may be placed, the squadrons in the firing line should be kept closed in on their centers as they become depleted by casualties during the advance.

When this is impracticable, reenforcements must mingle with and thicken the firing line. In battle the latter method will be the rule rather than the exception, and to familiarize the men with such conditions the combat exercises of the regiment should include both methods of reenforcing. Occasionally, to provide the necessary intervals for reenforcing by either of these methods, the firing line should be thinned by causing men to drop out and simulate losses during the various advances. Under ordinary conditions the depletion of the firing line for this purpose will be from one-fifth to one-half of its strength.

506. Subject to orders from higher authority, the colonel determines the point from which the assault is to be made. The firing line having arrived at that point and being in readiness, the colonel causes the charge to be sounded. The signal is repeated by the trumpeters of all parts of the line.

The platoon and squadron commanders give the command: **TO THE ASSAULT**, repeat the command charge and lead their units to the assault as explained in the School of the Platoon.

The further conduct of the assaulting troops will depend upon circumstances; they may halt and engage in pursuing fire; they may advance a short distance to obtain a field of fire or to drive the enemy from the vicinity; they may assemble or reorganize. If the enemy vacates his position, every effort should be made to open fire at once on the retreating mass, reorganization of the attacking troops being of secondary importance to the infliction of further losses upon the enemy and the increase of his confusion.

A portion of the attacking line may be quickly mounted to conduct a more rapid pursuit and to intercept the enemy's retreat.

In combat exercises the colonel will assume a situation and terminate the assault accordingly.

THE DEFENSE.

507. In defense, as in attack, the regiment is the tactical unit best suited to independent assignment. Defensive positions are usually divided into sections and a regiment assigned to each.

The colonel locates such fire, communicating and cover trenches, and obstacles as are to be constructed. He assigns squadrons to construct them and details the troops to occupy them.

The colonel reenforces the firing line in accordance with the principles applicable to the attack and explained in connection therewith, maintaining no more rifles in the firing line than are necessary to prevent the enemy's advance.

The supply of ammunition being usually ample, fire is opened as soon as it is possible to break up the enemy's formation, stop his advance, or inflict material loss; but this rule must be modified to suit the ammunition supply.

508. If ordered or compelled to withdraw under hostile rifle fire or in the presence of hostile infantry, the support will be posted so as to cover the retirement of the firing line.

When the regiment is operating alone, the support must be strong and must be fed sparingly into the firing line, especially if a counter attack is planned. Opportunities for counter attack should be sought at all times.

EMPLOYMENT OF THE REGIMENT.

509. Careful training in maneuvering in fighting formation is essential, for only those formations that have been constantly practiced are useful in war. Such training has for its object the preparation of the regiment for the different rôles which it may be called upon to fulfill, whether acting alone or with other troops.

In these regulations it is possible to set forth general principles only; the application will vary with each particular case.

It is the duty of the colonel, in tactical exercises and maneuvers, to vary the hypotheses and to place his regiment in the different situations in which it might be found in a campaign.

The regiment is above all the cavalry unit of attack; it combines the conditions of mobility and cohesion, indispensable to success in mounted action.

It may be formed into an attacking line and a reserve, or into combat groups. A squadron may be employed for flank attack or as a flank guard.

It may operate alone or as part of a larger unit, or it may be combined with troops of all arms.

It seeks decisive results by dismounted action when mounted action alone would not obtain them.

THE REGIMENT ACTING ALONE—MARCHES—UTILIZATION OF THE TERRAIN.

510. When at a distance from the enemy, the regiment marches on the road or across country under cover of an advance guard or of scouting patrols.

On nearing the enemy the approach formations should be adapted to the terrain and to the end in view.

The double column, making use of echelons and opening and closing at will, permits the regiment to take advantage of cover and utilize the avenues of approach.

In open country, where they are exposed to surprise by fire, the double column and the column of platoons are to be avoided. The regiment then uses open formations—echeloned or extended line of columns, echelons, extended order.

COMBAT PATROLS.

511. During the approach march, the regiment covers itself to the front, rear, and on its flanks by combat patrols.

They operate with a variable radius of action, according to the terrain, and are constantly in touch with the regiment.

They remain in observation in the direction which has been indicated to them or on the flanks which they are ordered to protect. They warn the colonel of all attacks or of any movements of the enemy, so as to give him time to make his dispositions. They continue their service of security during the entire duration of the action.

GROUND SCOUTS.

512. Besides the ground scouts who ride in advance of each squadron, the colonel may have the regiment preceded at a greater distance by a group of scouts operating under an officer. Their movements, signs, and signals let the colonel know the difficulties presented by the terrain and permit him to take up, in ample time, the necessary formations to pass around or to cross obstacles.

RECONNAISSANCE OF THE ENEMY.

513. Under cover of the security patrols the colonel goes in advance of his squadrons in order to observe for himself the enemy and the terrain, and thus determine the preliminaries of the combat.

The regiment remains in touch with him, ready to execute his orders and to join him.

ATTACK AGAINST CAVALRY.

514. In Cavalry encounters, the colonel should seek to reach the most vulnerable point of the adversary, particularly the flanks, and to concentrate his greatest effort on the chosen point of attack.

The habitual formation for the attack comprises an attacking line and a reserve, the former containing the greater part of the force.

Another fraction may, when necessary, be ordered to maneuver so as to support the attack.

The advance guard, if it has not joined the main body before the attack, may be called upon to perform one or the other of these rôles.

The machine-gun unit may be used in this action as a pivot for the movement or disposed on the flank so as to cover possible rallying points with its fire. It should never be so placed that its fire will be masked by the advance of the attacking line.

FLANK GUARDS—OFFENSIVE FLANK GROUPS.

515. The unit designated for flank attack or flank guard should be detached from the flank involved.

When attacking in a formation other than echelon, the captain commanding a squadron on an unsupported flank may, upon his own initiative, detach a flank guard.

ATTACKS AGAINST INFANTRY AND ARTILLERY.

516. The regiment conforms to the principles set forth in the School of the Squadron and in the Employment of Cavalry.

THE REGIMENT IN THE BRIGADE.

517. The regiment as part of a larger unit devotes itself to the rôle assigned, or which falls to it in the course of the action, conforming to the principles previously laid down.

When the regiment is placed on a flank, the colonel on his own initiative, when specific orders are lacking, assures the protection of this flank and the observation of the neighboring zone.

THE REGIMENT IN COMBINATION WITH TROOPS OF ALL ARMS.

518. A regiment attached to a command composed of all arms, scouts and fulfills the various missions which are intrusted to it by the commander.

When it has gained contact it reconnoiters the enemy's position or his movements. At the same time it masks and protects the staff officers in their reconnaissance, the advance guard and the battalions of the first line in their deployment, and the batteries going into position; and opposes any enterprise of the hostile Cavalry.

As soon as the advance guard has deployed and the Artillery has gone into position, the regiment withdraws from the front and takes position on one of the flanks.

During the engagement the regiment is charged with exploration and security at a distance from the flanks, keeps in view the movements of the enemy, and opposes enterprises, such as turning movements. The regimental commander maintains constant communication with the commander of the entire force.

On the flanks, the regiment cooperates in the attack by turning the enemy's flank; it pushes forward combat groups to take in flank or rear the enemy already engaged; it seeks to surprise his artillery, etc.

Back of the line and between other bodies of troops it is held ready to support the infantry attacks, to intervene by squadrons or half-regiments whenever there is a favorable opportunity, and particularly to take advantage of and complete the partial successes of the infantry attacks, being careful not to mask the fire of the attacking line.

If the hostile Cavalry in superior numbers prevents the execution of its various missions, the regiment maneuvers so as to draw them under infantry or artillery fire.

The enemy repulsed, the regiment takes up the pursuit, seeking to overlap his flank.

In case of a reverse the Cavalry, if necessary, sacrifices itself to cover the retreat of the other troops.

The colonel must not hesitate to utilize dismounted fire action when that will best secure results, keeping in mind the mounted rôle that his regiment may be called upon to fulfill, and the necessity that may arise for a gallop to a new position.

519. In instruction, each exercise should have a tactical object and be based on a simple and clearly defined hypothesis.

It should always be terminated by an explanation of the means employed and a criticism of the execution.

The different arms are represented by troopers carrying pennants of different colors. An officer commands, and has the necessary noncommissioned officers as assistants.

In general, yellow represents Cavalry; blue, Infantry; red, Artillery.

Four markers, boot to boot (as a set of fours), represent a squadron in column.

Four markers, with intervals of 12 yards, represent a squadron in line.

The markers serve first as fixed objectives; later, they are given liberty of movement.

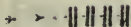
XVIII

Note - To economize space, in these plates, but four squadrons are shown in the Regiment. With six squadrons, the same principles apply, a squadron is added to each wing.

THE REGIMENT.

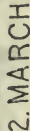
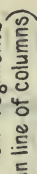
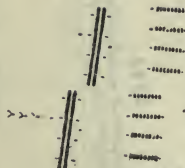
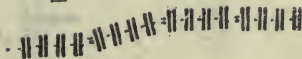


THE REGIMENT



By the right
in echelon

2. MARCH



1. By the right

in echelon.

(Indication.

half-regiments,

in line of columns)

The Colonel later indicates

Line of platoon columns,
and line.

THE REGIMENT.

XX

The colonel placing
himself at the head of
the 3d Squadron,
leads toward the enemy

1 Line. 2 MARCH

THE REGIMENT

1 On 4th Squadron
in echelon

2 MARCH

The Colonel later puts the directing
squadron in line of platoon columns
and then in column

The others conform

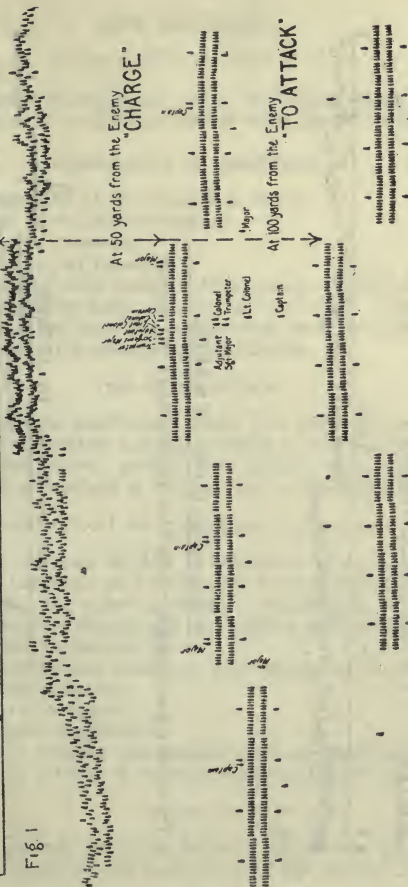
1 Line 2 MARCH

1 On 2d Squadron, in echelon 2 MARCH

XXI THE REGIMENT

Enemy's Cavalry in Order (flanks protected)

Fig. 1



The Regiment Advancing in Line to charge formed Cavalry whose flanks are protected

XXII THE REGIMENT

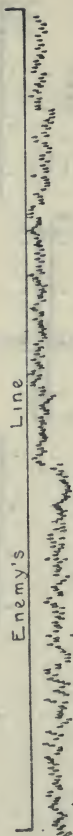
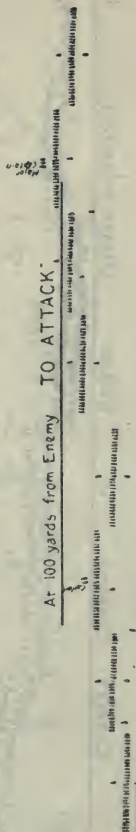


Fig 2

At 50 yards from Enemy "CHARGE"

The 1st Half regiment charging in Single Rank followed by the 2d Half Regiment



THE BRIGADE.

(Plates XXIII to XXVIII.)

520. A brigade is composed of two regiments and a battery of Horse Artillery. It is employed alone or as part of a Cavalry division.

FORMATIONS OF ASSEMBLY.

521. The assembly of the brigade is made:

In line of double columns.

In line of masses.

In column of masses.

It may be formed with variable distances and intervals. In line the battery is on either flank; in column it is in rear. The assembly is made under cover from the observation and fire of the enemy. The service of security guards against surprise.

THE ROUTE MARCH.

522. The brigade marches in route like the regiment; the distance between regiments varies according to circumstances.

When the ground will permit, the column of platoons may be employed with advantage to reduce the depth of the brigade.

FORMATIONS OF MARCH OR MANEUVER.

523. The formations in line of masses or in column of masses with variable intervals and distances serve to move the brigade under cover from one point of assembly to another. They are prohibited as maneuver formations on account of their vulnerability.

The maneuver formations are:

(a) The line of double columns, with greater or less intervals.

(b) The double column.

(c) The line of columns.

(d) The echelon formations.

In line and in echelon the battery is on the flank designated by the general. In column it maintains its position in rear.

COMMAND.

524. The general leads the brigade by placing himself at the distance of a squadron front in advance of the colonel of the direct-

ing regiment. The brigade adjutant is 2 yards on his left; the remainder of his staff and officers acting as agents of communication, ride, in order of rank from right to left, 2 yards in rear. His orderlies ride 2 yards in rear of the staff. He goes wherever he thinks his presence is necessary; if need be, the colonel of the directing regiment or some designated officer takes his place in leading the brigade.

The general's orders are transmitted by agents of communication; as a rule, each regiment detaches for this purpose an officer and a trumpeter.

EVOLUTIONS.

525. The evolutions of the regiments in the brigade are similar to those of the squadrons in the regiment.

When the brigade is in any line formation, the general designates the directing unit. The colonel of the regiment to which this unit belongs follows at a distance of squadron front behind the general. The colonel of the other regiment places himself in front of the squadron on his interior flank.

Before giving orders for deployment, the general should put the brigade into an open formation. When the brigade is in column, the second regiment in forming line takes its place on the left of the first; however, the general can indicate to it to move up on the right or to the right and left by half-regiments. The first regiment faces the objective and deploys; the second regiment uncovers by increasing the gait, and deploys when it has the necessary interval; it follows at first in echelon, then comes up on the line.

FORMATIONS OF APPROACH.

526. The most appropriate formations for the approach are double column and echelon. The brigade being in double column, the general directs: **On the first half-regiment, by the left form echelon.** The general may direct the half-regiments to form in mass.

The double column allows the brigade to take advantage of inequalities of the terrain and to pass rapidly to an open formation. The brigade being in double column: **First regiment in line of columns; second regiment by the right and left in echelon of half-regiments.**

The echelon formations have the advantages of both shallow and deep formations; they allow the units to be engaged successively, and admit of immediate deployment in all directions. The flexibility of their march and the fluidity of their movement lend them-

selves to advancing or refusing a flank, and are especially suited to combined action of combat groups.

The brigade echelons are usually of half-regiments; they may be of regiments; they are formed as indicated in the school of the regiment: **On such regiment, or on such half-regiment, in echelons; or, by the right, in echelon of regiments (half-regiments).**

The general indicates to the leading unit the formation to take, the direction, and the gait; the other echelons regulate on the leading echelon.

The intervals and distances separating the echelons should be such as to permit of rapid deployment forward, in an oblique direction, or to the flank; however, when the deployment is to be made to the front, the general may reduce the distances so as to increase the cohesion and force of the attack.

If the objective is in a direction oblique to the front, the general directs the leading echelon so as to face the objective before giving the command for the deployment.

In case of surprise, the general leads out and deploys the echelon most favorably placed to attack; the others support the attack.

COMBAT.

527. The brigade in mounted action conforms to the principles laid down in Employment of Cavalry.

THE BRIGADE, DISMOUNTED.

(See dismounted combat in Employment of Cavalry.)

528. The action of dismounted cavalry, whether in offense or defense, differs materially in the ordinary case from that of Infantry.

While the Infantry bases the arrangement of the combat upon a succession of progressive efforts made by troops echeloned in depth, the dismounted Cavalry is ordinarily compelled to rush the attack or to stop the enemy at a distance by employing at once upon an extended front all the men and rifles that are available. The relative weakness in numbers of the Cavalry and the likelihood of a smaller supply of ammunition are not favorable to a combat of prolonged duration. On the contrary, its spirit of enterprise, its characteristic qualities of quick action and mobility fit it admirably for

offensive envelopments, rapidly executed, and for maneuvering on the defensive to avoid the blows of the adversary.

Promptness in decision, skill and rapidity in the execution of the approach march, instantaneous deployment of the fractions engaged and operating in groups extensively articulated, assure to the Cavalry the benefit of the element of *surprise* which is essential to success.

The chief must utilize to the utmost the effect of surprise, combining fire action with vigorous mounted attacks on the flanks of the enemy. In such combats it is of the utmost importance that the leaders of the different groups should coordinate their efforts to achieve the common end.

529. Instances will arise, however, in which the Cavalry must make use of dismounted action alone to capture or hold an important position.

In such cases the attack or defense must be conducted as is an infantry attack or defense.

530. The brigade is deployed by the general's order to the commanders of regiments and special units. The order should give them information of the situation and of the proposed plan of action. In attack the order should assign to each regiment not in reserve its objective or line of advance. In defense it should assign to each its sector. In either case it should designate the troops for, and the position of, the reserve, and prescribe the employment of the machine guns and the battery.

Both in attack and defense the order may fix the front to be covered in the deployment.

Encroachment upon the proper functions of subordinates and unnecessary details should be studiously avoided.

531. The brigade when operating alone and attacking should undertake an enveloping attack if it does not result in over-extension.

Assuming a brigade of 1,200 rifles, an extension of more than 800 yards between its extreme flanks when making an enveloping attack alone is seldom justifiable; when part of a battle line, a front of 400 yards can rarely be exceeded.

532. In defense the front occupied when acting alone or posted on or near the flank of a battle line should seldom exceed 500 yards; when posted as an interior brigade the front may be increased to 700 yards. The front may be somewhat longer than in the attack, since smaller regimental supports are justifiable.

When the brigade is operating alone, however, the brigade reserve should be as strong in the defense as in the attack unless the flanks are secure.

533. The general should always hold out a brigade support, generally a half-regiment. When the brigade is operating alone it may be advisable to hold out more at first.

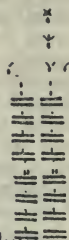
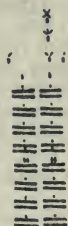
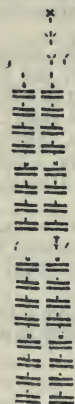
Whereas the support held out in each regiment of the firing line is intended to thicken the diminishing firing line at the proper times and sometimes to lengthen it, the reserve held out in a brigade operating alone is used for this purpose only as a last resort. Its primary functions are: In attack, to protect the flanks, to improve fully the advantage following a victory, or to cover defeat; in defense, to prolong the firing line, to make a counter attack, or to cover withdrawal.

It is the general's chief means of influencing an action once begun. It should be conserved to await the proper moment for its employment; the combat will seldom come to a successful issue without its employment in some form.

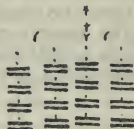
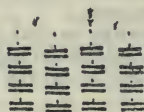
The reserve of a brigade operating as part of a larger force becomes a local reserve. It replaces depleted supports, and in attack strengthens and protects the firing line in the assault.

THE BRIGADE

XXIII

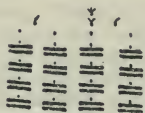
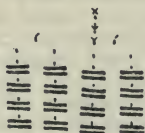


The Line of Double Columns



The Double Column

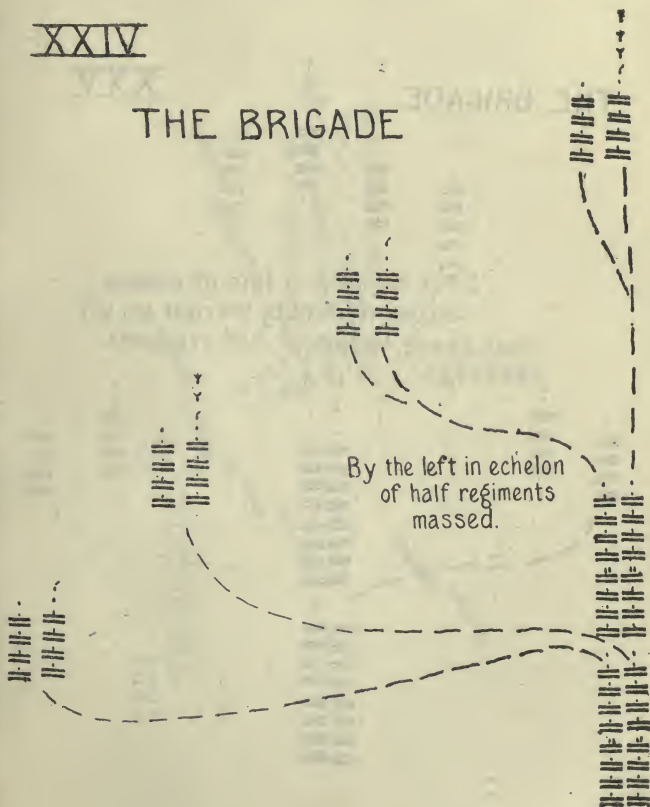
The Line of Masses



The Column of Masses

XXIV

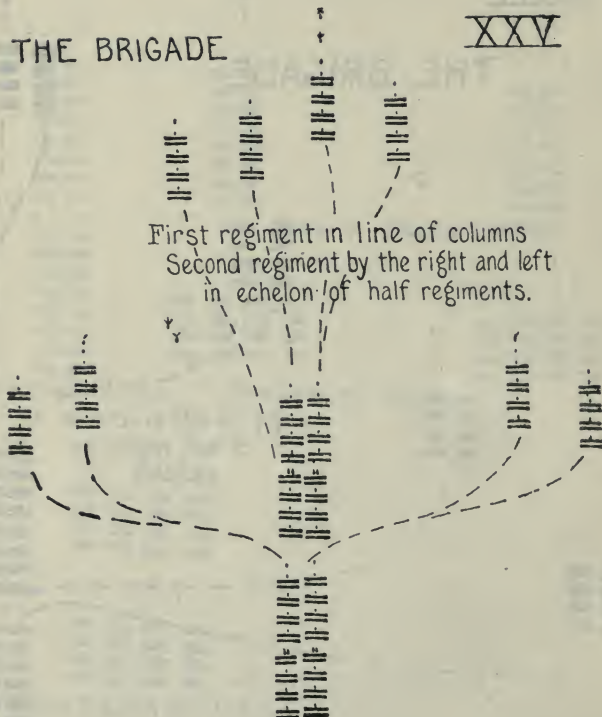
THE BRIGADE

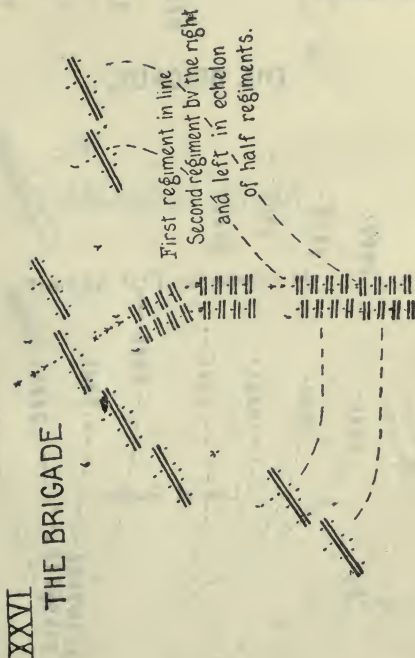


THE BRIGADE

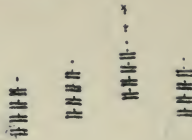
XXV

First regiment in line of columns
 Second regiment by the right and left
 in echelon of half regiments.

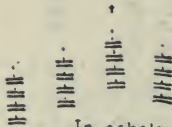




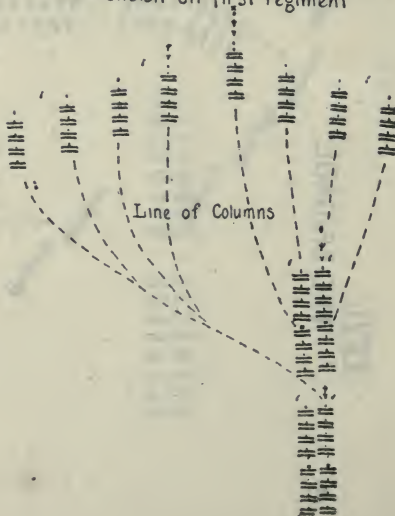
XXVII



THE BRIGADE



In echelon on first regiment



XXVIII THE BRIGADE

THE DIVISION.

534. The normal composition of the Cavalry division is three Cavalry brigades, a regiment of Horse Artillery, a pioneer battalion of engineers, a field battalion of signal troops, and the necessary sanitary personnel.

It is commanded by a major general, who rides where he can best observe movements and issue his orders. The chief of staff rides 2 yards to his left; the remainder of his staff, the flag, and orderlies, ride in order of rank in convenient formation in rear.

The batteries of Horse Artillery that accompany brigades when detached are, when the division is united, formed with their regiment.

535. The brigades are designated: In line, *right*, *center*, and *left*; or if one be in rear, *right*, *left*, and *rear*; in column, *leading*, *center*, and *rear*. Unless otherwise directed by the division commander, the brigades are posted from right to left in line or from front to rear in column in the order of rank of their commanders.

When in line, the division commander designates the directing unit.

The principles prescribed for the evolutions of the brigade apply to the division.

The positions of the Artillery and of the special units are as prescribed by the division commander.

536. The formation for approach is a formation in readiness which must be susceptible of rapid transformation into combat formation. It is governed by the plan of attack, the information possessed of the enemy's disposition and movements, and by the terrain.

The approach may be executed by a continuous progression, utilizing the most favorable avenues of approach leading toward the enemy, but it is usually executed by a succession of rapid advances, interrupted by halts in favorable positions to enable the advance guard or scouts to cover the next advance, or to get the command in hand after the passage of defiles or difficult terrain.

537. The division commander makes his reconnaissance under cover of the advance guard or scouts. He is accompanied by the brigade commanders and the artillery commander and, when the machine guns are massed, by the commander of the machine guns. He determines the objective of the principal attack, the time of its delivery, and the troops which are to participate therein, as also the rôle of the other units of the division.

He then gives his orders under the form of combat missions and indicates the end to be attained and the rôle of each commander. He leaves to commanders the largest initiative possible in the execution of their rôles.

538. The unit designated as reserve places itself within reach of the division commander or goes to the place designated by him.

(For the employment and protection of Artillery, see Horse Artillery and Machine Guns.)

PART II.—CAMPAIGN.

EMPLOYMENT OF CAVALRY.

GENERAL PRINCIPLES.

539. Mounted action is the principal method of fighting of Cavalry. Animated by an aggressive spirit, it will seize every opportunity to attack with the horse and the saber.

Success is achieved by simplicity in conception and vigor in the execution of plans.

In the larger units Cavalry receives the assistance of Horse Artillery and machine guns.

540. The rifle enables Cavalry on foot to engage in effective combat, offensive or defensive, against forces of all arms. In many cases dismounted action and the mounted charge may be combined to advantage.

A bold leader will, however, frequently find opportunities for mounted attack, which will produce more rapid and decisive results than can be gained by the most skillful use of the rifle.

541. In combining shock with fire action, the latter may be provided by the Horse Artillery, machine guns, or rifles, or by any combination of these arms.

The duty of Horse Artillery and of machine guns is to prepare the way for the Cavalry, to support it in the mounted attack, and to augment the fire effect of its rifles in the dismounted attack.

542. On account of the variety of its weapons and methods of action, Cavalry is capable of independent operations under practically all the conditions of war.

543. The large size of modern armies and the great extension of their fronts have rendered it more difficult than ever to change dispositions once made and have augmented the importance of celerity and endurance in marching. Every improvement in the means of observation and communication serves to increase the opportunities and enhance the value of Cavalry as the fighting force of greatest mobility.

544. Cavalry reconnoiters the theater of operations and the enemy's dispositions; it protects the army against surprise and screens its movements. In battle it fights in combination with the other arms and, by virtue of its mobility, exploits their successes. It is able to furnish rapid support at threatened points, or, by fighting delaying actions, to gain time and minimize the consequences of a reverse.

545. *Habitual reliance on dismounted action will weaken and eventually destroy initiative;* difficulties of terrain are likely to be overestimated. Cavalry imbued with the true spirit of the arm does not remain inactive, waiting for a more favorable opportunity for a mounted charge. Taking conditions as it finds them, enterprising Cavalry will adopt the forms of action suitable to the occasion and make its participation in the operations both prompt and effective.

546. When small bodies of Cavalry unaccompanied by horse artillery or machine guns meet similar bodies of the enemy's Cavalry, their best course will usually be to make an energetic mounted attack at once, should the ground be in any way suitable, without delaying or weakening the mounted attack by dismounting a part of the command.

By showing a *resolute determination to attack* promptly whenever possible, Cavalry may establish a moral superiority over the opposing Cavalry which will prove of inestimable value throughout the campaign.

547. When opposing forces of Cavalry find themselves in contact a decision as to the action to be adopted must be made and acted upon at once or disaster will result. A leader who, by means of his patrols and scouts, is first apprised of the presence of the opposing force has, owing to the rapidity of maneuver of Cavalry, a great advantage.

The Cavalry leader should prepare himself by practice in field exercises for any of the various combinations of cavalry action. He should cultivate the habit of prompt decision and lean always toward the aggressive.

548. During the operations preceding a general engagement the first and most important antagonist is the enemy's Cavalry. In order to dominate the territory between the armies the enemy's squadrons should, if possible, be overthrown in mounted combat and his horsemen driven completely off the field.

549. In a battle of all arms even relatively small forces of Cavalry may achieve important results by seizing an opportune moment. But decisive participation in a general engagement, whether to repulse the enemy or support our own attack, is possible only by the employment of large masses of Cavalry.

550. The character of the enemy and the nature of the terrain exercise a controlling influence on the operations of Cavalry. Against savage horsemen who scatter widely, the charge of a compact force becomes a blow in the air. In a tropical jungle and over submerged areas shock action finds but little application. In countries covered with forests, or where the cleared land is cut up into small parcels by stone walls or wire fences, there will be many more opportunities for fire action than for shock.

While the nature of operations probable for Cavalry may thus often be predicted, its organization and training should nevertheless prepare it thoroughly for all kinds of work of which Cavalry is capable, and thus enable it to take advantage of opportunities in whatever form they may occur.

551. Cavalry should be bold and enterprising. In its rapid movements it often encounters the enemy in unprepared situations. Undue caution then forfeits the advantages of surprise, which is an influential factor in the success of a charge, since the moral element is combined with the effect of the weapons.

552. Cavalry must not only be strongly impressed with the power of its rifles, but must be ready to assault on foot and to capture positions held by the enemy with the same determination and resolution as Infantry.

With cover, many of the functions of Cavalry, such as ambush, delaying and harassing movements, raids and flank attacks, become more easy of accomplishment.

553. The most effective directions of attack are against the enemy's flank and rear. Enterprises against his communications may secure valuable results, but they should be so timed that the Cavalry will not be beyond reach for use in a general engagement. *On the battlefield all bodies of troops must seek to contribute to the achievement of victory.*

554. The mobility of Cavalry comes into full play in the pursuit, to reap the fruits of victory; and in a retreat, in the quick utilization of successive defensive positions, and in the rapid withdrawal therefrom after breaking off the engagement at the last moment.

COMMAND AND LEADING.

555. The speedy course of a cavalry battle, with its sudden changes, requires special qualities in a leader. He should be active and energetic, with a keen eye and good judgment, quick decision, and a firm will; he should be able to express himself readily in brief and clear orders.

556. The personal influence exercised by the bearing and example of a cavalry commander, and the confidence he is able to inspire, form a powerful factor in the efficiency of a command. All leaders should bear in mind that *failure to act*, and the suspicion it evokes, form a more serious charge against a cavalry officer than can be based on a mistake in the method of operations.

557. A large degree of independence of action must be granted to a cavalry commander in carrying out his operations in conformity with the general plan of the commander-in-chief. He should never wait for orders but be ready to assume the entire responsibility in engaging the enemy. In case of doubt the boldest decision is generally the best.

558. The condition of the horses should be the object of constant solicitude for the commander and all his subordinates. He should endeavor to keep them in full vigor up to the time of combat by avoiding useless marching and undue hurry in deployment, as well as by taking advantage of opportunities to halt and rest—dismounting the troopers—and to feed and water when not in immediate danger of attack.

Strict economy must be practiced with regard to advance guard, outposts, detached units, and the orderly and messenger service; otherwise, the ranks will be depleted and the horses run down. Thus, under normal conditions, the strength of the command is husbanded, but on the day of battle, especially in pursuit or retreat, it should be used without stint; if necessary, to the complete exhaustion of man and horse.

559. Unnecessary losses should be avoided by taking advantage of cover and adopting suitable formations; but the troops should never be withdrawn so far from the zone of fire or so massed as to render doubtful their opportune participation in the action.

560. The leader goes to a position from which he can see the country and the enemy, at the same time retaining control of his troops. He remains in observation or sends out officers to reconnoiter. Personal observation is the best, and before an attack on Cavalry is indispensable.

561. Before entering into an engagement subordinate commanders should, as far as possible, be informed of the plans of their chief.

562. During a general engagement the cavalry commander must maintain communication with the commander-in-chief, so that he may report the results of reconnaissance and his own operations, and also remain informed as to the course of the battle and changes in plans at headquarters. He also keeps in touch with the situation in adjoining parts of the Army.

563. In order to support his own Infantry and Artillery effectively, or fight that of the enemy, the cavalry commander should know the characteristics and methods of combat of those arms.

564. Enterprise is the highest virtue of a cavalry leader. To keep the bulk of the forces in hand is a well-established means to success.

RECONNAISSANCE.

(See also F. S. R., "The Service of Information.")

565. Before entering the theater of operations Cavalry should be in possession of a summary of the available general information concerning the enemy and his territory, including maps. In the field local details are obtained from all possible sources and promptly forwarded to superiors; the work of gathering such information by individuals or bodies of troops is designated *reconnaissance*.

At a considerable distance reconnaissance is usually effected by bodies of independent cavalry varying in size up to a division, or by special details from the divisional cavalry, while a more limited reconnaissance is carried out by cavalry units assigned to the duty of protection.

INDEPENDENT CAVALRY.

566. The duty of independent cavalry is to find the enemy's main body and then to preserve contact. At the same time it seeks to prevent like enterprises on the part of the enemy's Cavalry, thus forming the cavalry screen. To accomplish these objects it is necessary to defeat the enemy's Cavalry. For combat the commander, therefore, maintains a *central mass*, from which the organs of observation—scouts and patrols—are sent out. When the latter are expected to fight they must be made stronger and be backed up by larger detachments known as contact platoons or squadrons.

567. Great latitude must be allowed the commander of independent cavalry. His instructions usually indicate only the country to be reconnoitered and the extent of the daily advance of the army; but attention may be invited to especially important localities.

568. Commanders of independent cavalry must solve the difficult problems confronting them without expecting aid from other troops. The march of the central mass depends upon information brought in, but is usually made by a series of rapid advances. The extent of front covered by independent cavalry should be such that the commander is able to exercise daily control over all parts of his command. For a brigade the limit would be about 7 miles.

In some cases, when the enemy is already located, or in covering and concealing a turning movement, the duty of forming a protective screen becomes of primary importance.

DIVISIONAL CAVALRY.

569. Cavalry attached to infantry units usually enters into the composition of formations for protection, and then perform such reconnaissance as the situation demands.

When there is independent cavalry in front, the divisional cavalry maintains connection therewith; when not, it reconnoiters far to the front and gains touch with the enemy if possible, operating in a manner similar to that of independent cavalry.

Though more restricted as to space, the reconnaissance of divisional cavalry goes more into detail and also gathers topographical information. As independent cavalry draws off to a flank, the divisional cavalry must be especially active to guard against surprise, gain information of the enemy's movements, and prevent incursions of his patrols.

PATROLS.

570. Patrols are small detachments, usually named in accordance with the duties expected of them, as *reconnoitering*, *visiting*, *connecting*, *flanking patrols*, etc.

The commander determines the number and strength of patrols according to circumstances. Small patrols are mobile, easily concealed, and economical of the fighting strength. On the other hand, hostility of the natives, presence of the enemy, and the necessity of sending messages make stronger detachments necessary.

571. Reconnoitering patrols.—The chief duty of reconnoitering patrols is to gather information. They should avoid combat and fight only when their mission demands it. The most skillful patrols accomplish results and return without being discovered by the enemy.

Instructions to patrols should be simple and definite, and understanding thereof verified.

Neighing, restless, or conspicuous horses should not be sent, and the equipment should be as light as possible.

572. Patrol leaders.—Skillful patrolling is the basis of efficient reconnaissance. Leaders, men, and horses are carefully selected with a view to all the qualities essential to success. Officers are detailed only in cases of special importance.

The patrol leader should have a map, watch, compass, field glass, message blanks, and pencils. He inspects his detail, remedies deficiencies, explains his instructions, and gives specific directions under his plans, which must be understood by all the members.

573. Conduct.—There is no normal formation for a patrol. It guards against surprise, usually with point and flankers. Scouts and special dismounted observers may be detached for short distances. Whatever formation is adopted it should favor the escape of at least one man in case of surprise.

The advance is made from successive points suitable for observation, where the map is consulted and further directions are given.

When a patrol is scattered, it reassembles at some place previously selected; if checked in one direction, it takes another; if cut off, it returns by a detour or forces its way through. As a last resort, it scatters, so that at least one man may return with information.

When it is certain that the enemy has been discovered, that fact should be reported without delay.

574. In order to develop efficient patrol leaders, the course of cavalry training should provide for frequent practice of patrols in reading the signs of the road and trail and other indications of the presence of the enemy, in distinguishing the various arms of his forces, and in estimating their strength, as prescribed in F. S. R.

575. Signals.—In addition to the signals prescribed for maneuver:

Enemy in small numbers: Hold weapon horizontally above the head.

Enemy in force: Same as preceding, but raise weapon repeatedly.

No enemy, or all clear: Hand well above the head, holding weapon vertically, or the headdress.

Take cover: Low downward motions with the hand, palm down.

Other simple signals, for example, with the headdress, may be agreed upon at any time, but they must be *familiar to all the men*.

TRANSMISSION OF INFORMATION.

576. Information to retain its value must arrive in time for use, hence it is the duty of all officers to facilitate its transmission. For short distances, and when other means are not available, information is carried by mounted messengers. With moving troops, and in the stress of battle or bad weather, technical means often are not established or fail in operation. Cavalry should, therefore, prepare itself to take over this service at any time by practice in the use of connecting posts and relay lines.

Despatch riders should be intelligent and well mounted. They often work in pairs; important messages are sent in duplicate over different routes, sometimes by officers.

Unless prevented by further orders mounted messengers must return to their squadrons without delay.

When motor cycles are available they should be utilized to gain and transmit information, thereby saving the horses.

PROTECTION.

(See also F. S. R., "The Service of Security.")

577. The general protection of a command of all arms is provided by the independent cavalry operating at a distance. Additional security is obtained by covering detachments constantly on duty to clear the way or to gain time for the main body to prepare for action.

On the march these detachments are called *advance*, *flank*, or *rear guards*; in camp or bivouac they are called *outposts*.

ADVANCE GUARDS.

578. The strength of the advance guard of a cavalry command is about one-fourth, or less, of the whole force. It is divided into two nearly equal parts, the *vanguard* and the *reserve*. The vanguard consists of the *advance party* and the *support*. The advance party sends out the *point* and the *flanking patrols*. The support and the reserve furnish their own *flankers*.

The point (2 to 4 troopers) is about 300 yards ahead of the advance party; the flanking patrols, somewhat less advanced, are several hundred yards to the right and left of the line of march; the advance party precedes the support by about 500 yards; the support is about half a mile ahead of the reserve and the reserve fully half a mile from the main body. Flanking patrols parallel to the support and the reserve are out half a mile or more. Connecting troopers preserve communication between support and reserve and reserve and main body.

579. All distances are variable, being regulated by circumstances and the orders of the commander. For example, they would be less in close country, at night, or in foggy weather, than in open country, in the daytime, or in fair weather.

580. Small commands adopt similar formations. A point, with several small patrols, is sufficient for a squadron; a regiment can dispense with a reserve.

581. Machine guns may accompany the reserve of a regiment or half-regiment on advance guard. Horse artillery is seldom assigned to the advance guard of commands not larger than a brigade.

582. The duty of an advance guard is to insure the safe and uninterrupted advance of the main body; to guard against surprise; to push back small parties; and to delay the enemy's advance in force.

583. *Advance Cavalry*.—Unless the ground is impracticable the advance guard of all mixed commands is provided with Cavalry for reconnaissance, flank patrols, etc. The portion preceding the point of the advance guard is known as the *advance cavalry*. It maintains connection with the independent cavalry and reconnoiters to the extent necessary.

When there is no independent cavalry in front, in which case the greater part or all of the divisional cavalry will be detailed for duty with the advance guard, the functions of independent cavalry are assumed by the advance cavalry, as far as practicable, and reconnaissance must extend at least far enough to the front and flanks to protect the column against surprise by artillery fire.

FLANK GUARDS.

584. The flanks of a column are protected in part by the advance guard. Additional security on an exposed flank is obtained by the parallel march of a detachment, called a *flank guard*. This varies in size from a patrol to a detachment of all arms, but is generally

strong in Cavalry. Formation and duties are similar to those of an advance guard; patrolling should be especially active in the direction of the exposed flank.

REAR GUARDS.

585. The formation of a rear guard is like that of an advance guard reversed. *Rear cavalry, rear point, and rear party* correspond to advance cavalry, point, and advance party.

586. The object of a rear guard is to gain time by forcing the enemy to deploy for attack or to turn defended positions. Horse Artillery and machine guns therefore enter into the composition of large cavalry rear guards. In rear guards of all arms all the parts except the reserve may be of Cavalry, for the mobility of the latter enables it to withdraw after breaking off an engagement.

587. As rear guards must be prepared to offer a stubborn resistance and can not count upon assistance from the main body they are relatively somewhat stronger than advance guards.

588. When the enemy is conducting an energetic pursuit the Cavalry endeavors to delay him by occupying successive defensive positions, retreat therefrom being effected under cover of fire from new positions in rear. The flanks should be protected by mounted bodies; machine guns and Horse Artillery cover the principal avenues of approach. The led horses of the firing lines should be so disposed and exits to the rear be so prepared as to facilitate rapid withdrawal. Mounted engineers are attached to the support and rear party and prepare additional delay by means of obstructions and demolitions.

589. An advancing force seldom requires a regular rear guard; a small detachment may be dropped out from the tail of the column to cover the rear. In case of danger of attack from the rear a rear guard of suitable size should be detailed. To ward off marauders, guerillas, etc., and to protect the field trains a large part of such a rear guard should consist of Cavalry.

OUTPOSTS.

590. The principal duties of outposts are to give warning of the enemy's approach and to stop or delay his advance. They seek early information of the enemy's movements and endeavor to prevent reconnaissance by his patrols.

The strength of the outposts varies with the nature of the country and the character and the proximity of the enemy; it should be kept down to the lowest limits consistent with safety seldom exceeding one-sixth of the command.

The outposts should cover the entire front and extend around the flanks; in some cases the rear must also be guarded. Troops for this duty are generally disposed as follows:

(a) A line of vedette squads, each consisting of a corporal and three troopers, one of whom, usually dismounted, is posted as lookout or vedette.

(b) A line of supports. Each consists of one or two platoons and furnishes the vedette squads for the front.

(c) A reserve. This is generally omitted except in the outposts of a large concentrated command.

591. The *vedettes*, posted at favorable points but concealed as far as practicable, watch to their front and flanks and form the *line of observation*. They should be provided with field glasses. Their *vedette squads*, dismounted, are in the immediate vicinity, under cover. At night and in special cases the vedette squads may be doubled to post double vedettes.

592. The *supports* form the *line of resistance*. They are posted on roads or other avenues of approach from the front, are dismounted and under cover, and strengthen their position by obstacles and intrenchments.

593. The distances between fractions of outposts vary greatly according to circumstances, but ordinarily the reserve should be a little over a mile from the main body, the supports about the same distance from the reserve or main body, and the vedette squads from a quarter to three-quarters of a mile farther toward the front.

594. The outposts are relieved every 24 hours; the vedette squads every 12 hours; and the vedettes every 2 hours or oftener. The extent of the front and the density of the line of observation, as influenced by the nature of the country and other circumstances, usually determine the strength of the outpost detail; it must in any case be sufficient to furnish the troops deemed necessary on the line of resistance.

595. Sections of the outpost line are usually assigned to commanders who are held responsible for constant readiness for action and also for timely warning to the troops in rear.

Machine guns and Horse Artillery with the outposts are located so as to sweep open spaces and lines of approach.

Suitable arrangements must be made for feeding, watering, and mess.

Facilities for intercommunication must be developed to the fullest extent and information from different sources must be forwarded to superiors without delay.

THE ADVANCE TOWARD CONTACT.

596. As long as distance from the enemy permits, the command will march on the roads in one or several columns. Progress is more rapid on roads than across country, and there is less fatigue.

The march of a large command in a single column is likely to be slow and tiresome; it also involves certain disadvantages with reference to subsistence, forage, and water. When parallel roads are available the march will therefore usually be made in several columns, each preceded by an advance guard. Ample arrangements must be made for free communication between the columns so as to insure their cooperation in emergency. Temporary separation by impassable obstacles should be avoided, unless at a safe distance from the enemy. When parallel roads of a satisfactory character are not available, or when their course is such as to cast a doubt upon the possibility of prompt cooperation, it is better to retain the advantages of concentration afforded by marching in a single column.

597. Thorough reconnaissance of the terrain, the study of good maps, and consultation with intelligent guides will enable the commander to issue orders and make dispositions with facility and confidence.

598. As soon as the advance has arrived at a stage where encounter with bodies of the enemy is no longer improbable, the columns approach each other, and the roads are left free for the Horse Artillery and trains.

599. A command is said to be concentrated when the various elements of combat are near enough to each other to cooperate in the same action. Such concentration should always be brought about before engaging the enemy, for attempts to effect a junction of the columns on the battlefield itself seldom succeed.

600. After leaving the road the columns close up and the command assumes a formation in readiness; that is, a line of short columns with deploying intervals, combined with such echelons as may be necessary to oppose flank attacks and to form a support

and a reserve. This formation gives the requisite elasticity for the command to pass over uneven ground, to take advantage of cover, and to effect a rapid deployment.

601. The movements of the Horse Artillery at this stage of the advance will depend on the nature of the country, the character of action expected, and the instructions of the cavalry commander. While retaining use of the roads as long as practicable, it eventually seeks positions on the flank and abreast of the main body.

Some of the machine guns may be detached to strengthen the advance guard; the remainder stay with their regiments until orders brigading them, or instructions for their movements, are received.

602. Increased reconnaissance will now become necessary. The additional patrols, some of which may be led by officers, receive special instructions to locate the enemy and ascertain his dispositions. These patrols must be supported by detachments when the enemy's patrols are already on the ground and are aggressive.

603. When the approximate position of the enemy is known and there is a chance to surprise him, this reconnaissance may be entrusted to a few intelligent scouts or selected officers in order not to betray our own presence and intentions.

604. The skill of the leader in conducting the further advance consists in keeping under cover as much as possible and in not being caught at a disadvantage. He will proceed from one good position to another nearer the enemy, passing over the intervening space at rapid gaits.

605. Before beginning the approach march, the field trains should be sent to a position offering facilities for parking and defense. The locations seized for the successive advances of the main body will in turn serve the same purpose for the field trains. Eventually the combat trains are separated from the command and follow at a sufficient distance to prevent becoming involved in the action.

606. For cavalry combat personal reconnaissance is highly important. At an opportune moment during the approach march, the commander, accompanied by several staff officers, and, if practicable, by the leaders of the principal subordinate units, proceeds to a point where he can see the ground over which his command may be launched in attack.

607. Having decided upon the plan of attack the commander then gives the necessary orders; a staff officer is charged with

supervision of direction and gaits, and the subordinate commanders return to their units.

608. In case of emergency, the commander should not hesitate to send his troops into action in spite of inadequate knowledge of the ground. Incomplete information as to the enemy's dispositions should not cause surrender of initiative.

609. In addition to reconnaissance constant observation by combat patrols is required to guard against the sudden appearance of hostile forces, especially on an unprotected flank. In large affairs, a platoon or even a squadron may be assigned to this service.

610. While it is the duty of all to report observations of military value without delay, the commander should cause general dissemination of up-to-date intelligence and results of reconnaissance. When practicable, subordinate commanders should mutually communicate important observations and changes in their situations.

MOUNTED COMBAT.

(See also F. S. R., "Combat.")

(a) AGAINST CAVALRY.

611. In the mounted charge of one cavalry force against another, the one attacking with the greater determination and entering the collision with the more violent impetus, combining velocity and cohesion, will be successful.

Officers and men must have a firm resolve to crush the enemy's lines by riding down whatever confronts them.

612. Good Cavalry must be able to charge repeatedly. It should be taught to rally quickly behind its leader in response to trumpet call or command.

It is only when the horses are thoroughly trained and hardened and kept in fresh and vigorous condition that Cavalry can satisfy all the demands of mounted combat. To arrive at the charging point with horses in distressed, blown, and unsteady condition would be to sacrifice the most important elements of success—vigor and cohesion in the shock.

613. It is the duty of the commander to cause the movements of his units to culminate in a charge against the enemy's main body in a favorable direction and at the right moment. His plan should be definite and simple, his orders brief and precise. Good observa-

tion and an efficient system of transmission of orders are essential to success.

614. As it will often be impossible to explain the details of proposed action, subordinate commanders must act largely on their own initiative, in conformity with the general plan of their chief.

615. After the attacking line has been deployed and set in motion the commander is no longer able to modify his plan. It is important, therefore, to avoid premature deployment and to keep a reserve in hand for emergencies.

616. If the enemy can be surprised as to the time or direction of the attack it will force hurried adoption of counter measures at a critical moment and place him at a disadvantage.

617. When cover is available, effort should be made to keep the enemy in doubt as to the direction of the main attack as long as possible and to strike him in flank, or at least in an oblique direction, combined with envelopment.

618. The most favorable opportunities for attacking Cavalry are found when the enemy is emerging from a defile, when he can be caught in column or in the act of changing formation, when his lines or echelons can be taken in flank, and, in general, whenever he can not quickly deploy equivalent forces to meet an attack.

619. Early information as to the enemy's location and dispositions, prevention of reconnaissance by his patrols, promptness of decision, and celerity of movement will enable the commander to secure the initiative. He keeps it by striking with rapidity and vigor.

620. The plan of the commander, made after personal reconnaissance, if practicable, should decide upon the moment for attack, the objective of the main attack, the troops to participate therein, and the rôle of the other units of the command.

621. There is no normal attack formation and definite rules can not be laid down. It is the duty of the commander, bearing in mind the general principles here enunciated, to utilize his troops in the manner deemed necessary for the achievement of victory.

622. However, a preliminary articulation of the command provides an *attacking line*, consisting of about two-thirds of the entire force, and a *reserve*.

The commander of each of the large combat groups of the attacking line adopts a formation suitable to his place and duty in the general line and conforming to the nature of the ground. He executes the attack by the simplest and most direct means, with

due regard to the position of the adjoining units. He sends out the necessary ground scouts and combat patrols on his own initiative.

623. Only such forces are deployed for the charge as appear to be sufficient to accomplish the object. These are followed at short distances by units in column or line of columns forming the *support*.

624. The support by its proximity increases the confidence of the charging line and is in position to furnish immediate assistance, and thus insure the success of the attack.

625. The greater part of the support is disposed in echelon to the attacking line on the unsupported or more exposed flank, prepared to meet enveloping or flank attacks of the enemy. For the latter purpose its units are generally formed in an echelon of columns, as the elasticity of this formation, while favoring facility of advance, permits quick formation of line for a charge in any direction.

626. The remaining squadrons of the support follow as an echelon to the less exposed flank, or in rear of the line.

The action of the support is directed principally against the intact units of the enemy, such as have not been broken by the charge of the attacking line or remain in support. As a rule, the greater part of the support does not mingle in the *mêlée* as long as intact bodies of the enemy are in the vicinity.

627. Immediate deployment while advancing against the enemy has an inspiring effect on the troops. On the other hand, deployment without gaining ground to the front is more quickly made, and may therefore be resorted to when it is desired to make the initial attack with large deployed forces instead of with the leading units only. Such deployment also is useful when space is limited, for example, behind cover, when the plan is to emerge therefrom in deployed lines to surprise the enemy.

628. If the attacking line is forced to cross a fire-swept zone the formation of its units should be modified so as to diminish the effect of the enemy's fire. Use may be made of cover, but upon approaching the enemy the troops must be in proper place and formation for rapid deployment; it is specially important to maintain the necessary intervals for this purpose.

629. While the flank attack is favorable to us, our own flanks require protection against similar action by the enemy. The best flank protection is afforded by impassable obstacles. Stone walls, thick hedges, and wire fences should be skillfully utilized for similar

purposes. Artillery and machine-gun fire sweeping large open spaces on the flanks afford efficient protection. In the general case the flanks are protected by echelons placed to the rear and outward.

A body of troops placed in echelon in advance of the main line forms an offensive flank, corresponding to the "flank attack" of the squadron and regiment. When the enemy is deficient in maneuvering capacity, or when he can be surprised by the advance echelon emerging from cover, the offensive flank, if skillfully led, promises decided advantages; for if the enemy changes direction to protect his menaced flank he exposes himself to a flank attack by the main line. In open country, however, a competent enemy will take effective counter measures, so that an offensive flank may find itself flanked in turn and thrown back in disorder on its own troops, separated from its main body, or enfiladed by fire.

A lateral displacement of the main body behind cover may be used to deceive the enemy as to the direction in which the principal attack is to be made.

630. If the enemy does not meet the attack, but retreats when collision is imminent, a part of the attacking line pursues at once to keep him going and inflict as much loss as possible; the remainder, kept well in hand, follows closely to assist in the enemy's destruction and to protect the pursuing troops against reverses.

631. When the enemy receives the shock a *mêlée* will result. With approximate equal numbers, determination, horsemanship, and skillful use of weapons decide the issue in such a contest.

Such units as have penetrated the enemy's line will rally with the utmost promptness and charging back attack the nearest forces of the enemy still intact or being rallied.

In the pursuit after a *mêlée* the troops disorganized by success are at the mercy of fresh hostile bodies. They must therefore be followed closely by supports or rallied units.

632. Should the attack fail, the troops withdraw with the object of rallying at the first available opportunity. Artillery, machine-gun, or rifle fire from favorable positions will check the enemy. During the withdrawal officers must endeavor to retain or regain control of their units, so as to be able to take advantage of favorable opportunities for counter attack.

633. The *reserve* formed in line of columns or echelon of columns, follows several hundred yards from the support, in rear of the weaker flank, or in the position assigned to it. The commander-in-chief, while observing the vicissitudes of the combat, resists the tendency

to participate in the various *mêlées*, and uses the bulk of his reserve as a unit, at a well-chosen time and place, to cause the final disruption of the enemy's dispositions.

634. Should the attack be successful, the reserve assists the pursuit, sending its last fresh troops into action as soon as rallied bodies become available to form a new reserve. In case of failure, the reserve forms a nucleus for the rally, and seeks to reestablish the combat or protect the retreat.

(b) AGAINST INFANTRY.

635. In the mounted charge against Infantry the form of attack, as well as the prospect of success, is influenced by a number of circumstances which may cause the problem to vary from the most difficult that can confront the cavalry leader to a mere round-up of dispirited fugitives.

636. The conditions of the ground are unfavorable when the enemy's position is surrounded by open spaces of extensive depth affording neither shelter from fire nor cover from view; also when soft soil or broken ground, dense vegetation or artificial obstacles delay the charging troops or break up their formations.

Rolling country, on the other hand, generally affords good opportunities for a protected approach and for surprise, especially if some cover is available.

637. The character of the enemy's troops should always be taken into account. An attack which, if made against well-trained and highly-disciplined Infantry would be doomed to failure, might achieve a brilliant success if delivered against troops only partly trained and deficient in experience, or demoralized by previous defeats.

638. The state of a campaign and the progress of a battle also have an important bearing on the vulnerability of troops. When the contest with the opposing Infantry has lasted for days, when severe losses have been suffered, when food and water are lacking, or when the vitality of the foot soldiers has been undermined by the climate or by an epidemic, the remnant of their fortitude may be swept away by a vigorous charge of horsemen, turning extreme fatigue and approaching exhaustion into utter demoralization.

639. Conditions for the mounted charge against Infantry are considered most favorable when the Infantry have exhausted their ammunition, when they are retreating in disorder and beyond

control by their officers, or when they have been severely shaken by artillery or infantry fire.

640. The mounted charge may also be useful in covering a retreat, and may be necessary to cut through surrounding forces of hostile Infantry.

641. The formation of the charging troops, if substantial results are to be achieved, must always have considerable extension in depth; the lateral extension should be sufficient to leave no part of the hostile force free from attack.

642. The commander should always seek to make his attack more or less as a surprise, thus gaining the advantage of moral effect. In this attempt he will be favored by preoccupation of the enemy already engaged with other troops, and by undulations of the terrain and other cover. At the propitious moment, or when the attacking force can no longer be concealed, it is generally best to go straight at the nearest portion of the enemy, unless the nature of the ground plainly indicates a different line of advance.

643. If the enemy can neither be approached under cover nor surprised, or when it is evident at an early stage that the attempt to do either has failed, it will be necessary to take up the gallop as soon as the enemy's fire makes itself felt, in order to diminish both the efficacy of the fire and the time of exposure.

644. Simultaneous charges against the enemy's front and one or both of his flanks, by a rapid succession of lines pushing through to the supports and reserves, tend to cause a dispersion of his fire and to increase the effect of the attack.

645. Preparation for the attack should be made by the fire of the horse batteries and machine guns belonging to the Cavalry, and also by artillery and infantry fire of neighboring bodies, directed, first against the objective of attack, and later against adjoining forces of the enemy.

646. When the attack is delivered only against the enemy's flank, the rear echelons should be struck at the same time as the firing line.

Rising ground toward the enemy's position diminishes the effect of infantry fire, which, moreover, is likely to be less steady as the attacking force closes upon them.

If choice be permitted, Cavalry should charge the enemy's right flank in preference to the left.

647. The charge against Infantry is usually made in successive lines, following each other at distances not exceeding 200 yards.

These lines are in single rank, except that the leading ones may be of foragers, and they should be supported by bodies in close order. The general effect of such attacks should be that of a rapid succession of blows, each line taking advantage of results achieved by its predecessor. The rallies should make use of such cover as may be available. Infantry in masses may be charged by lines of short columns. In cases requiring instant action the Cavalry charges in whatever formation it finds itself.

648. Against unshaken Infantry a decided success can be obtained only when it is possible to get near to the enemy without being discovered and to attack by surprise. It is then more important to utilize the favorable moment at once, than to attack in perfect formation a little later.

649. Should Cavalry be ordered to relieve the pressure against its own Infantry or Artillery by immediate mounted action, it may be forced to make the attack without the advantage of surprise. In such cases the gallop will probably have to be taken up at greater distance in order to reduce the time of exposure to fire. The commanders concerned should be informed of the intention to attack so that they may make good use of the respite afforded by the sacrifices of the Cavalry.

650. The extent to which the enemy's action is diverted by the danger of the cavalry attack and the number of counter measures he is induced to take will indicate the degree of relief afforded to the other arms.

651. Against badly shaken and disordered Infantry the mounted charge should achieve great successes. In such cases it is of decisive importance to attack at the right moment, without delaying to adopt a better formation or to seek a more favorable direction. Effective fire of pursuit of our own Infantry or Artillery should not be masked by the cavalry charge.

652. The fire of dismounted Cavalry is assumed to be equivalent to that of a numerically equal force of Infantry. On account of the led horses dismounted Cavalry is very sensitive in regard to its flanks and will therefore seek to take advantage of natural or artificial obstacles for protection. In the attack on dismounted Cavalry the location of the enemy's led horses should therefore be ascertained as soon as possible and the attempt made to capture them after defeating and driving off the mounted reserve.

(c) AGAINST ARTILLERY.

653. The conditions for an attack on Artillery are favorable: When it can be surprised, caught in motion or ready to move, or while in the act of limbering or unlimbering; and when it is without support, or when its infantry supports have exhausted their ammunition.

654. With an open field of fire, Artillery in position is very strong in front; it is weak in the flanks—less so in rear. Whenever possible, therefore, the attack should be delivered against a flank.

When undulating ground is available for the approach, when the guns are behind cover and can use indirect fire only, and when the supply of ammunition is low, Artillery can be charged in front without too serious loss, by advancing at rapid gaits and in open formations.

In an attack on batteries placed in an isolated position or on a flank it will generally be advantageous to make a secondary frontal attack, or at least a demonstration with lines of foragers, to draw the enemy's fire and divert his attention from the main attack against a flank.

655. In a cavalry battle, when the commander deems it necessary to divert the enemy's artillery fire from his main body and thinks the batteries can be reached, he will designate one or more squadrons for this purpose; they will charge as foragers in the quickest and most direct way.

656. When the enemy's artillery forms part of the general line of battle, it will usually be impossible to charge it in flank. The formation for attack should then be in a succession of lines separated by distances exceeding the depth of a shrapnel burst (200 yards). The first line or first two lines will be deployed as foragers; succeeding lines will be in single rank as supports. These are followed by a reserve in line or echelon of columns. One object of the formation in depth is to prevent the hostile artillery from embracing the entire attacking force with one elevation of fire.

657. The foragers attack the cannoneers and teams; the supports charge the enemy's supports and secure the battery. The reserve follows and is held in hand to meet hostile cavalry or other troops that may attempt to recover the guns.

658. The attack on Artillery should usually be made on broad fronts, not only covering the batteries and extending beyond their flanks, but engaging adjoining troops so as to prevent a converging fire on the charging lines. Under modern conditions the advance

will be started at such long distance that it will be impossible to recognize and point out separate objects in the defender's line; and, once under serious fire, it is too late to give instructions and effect changes of direction. The rapid advance and charge are therefore usually made straight at the enemy's position; the gaits must be controlled so as not to exhaust the horses in arriving at the objective. The reserve must close up as the crisis approaches in order to meet eventualities and take advantage of opportunities.

659. If the cannoneers take shelter under their carriages or elsewhere and defend themselves with small arms, the troopers use their pistols and must not hesitate to jump off their horses and attack with the rifle, provided there is no immediate danger of counter attack by the enemy's Cavalry.

660. After capturing the batteries an effort should be made to carry off the guns and caissons. If this be not possible for lack of time, the guns should be disabled and the horses killed, or the traces cut.

To disable a field gun, open the breechblock and then break it with a heavy hammer, or explode a charge of guncotton or dynamite in the breech with the block partly closed, or fire a shotted gun with its muzzle against the chase of another. Guns of the Krupp system may be temporarily disabled by carrying off the breechblock or breaking the handle.

661. If the cavalry attack succeeds in causing a temporary suspension of hostile artillery fire, or its deviation from other objectives, this fact alone may suffice to exercise a far-reaching influence on the outcome of the battle.

(d) AGAINST MACHINE GUNS.

662. Machine guns will generally be used in groups of two or four guns, seldom in larger bodies.

Artillery is the most powerful weapon against machine guns, when they can be definitely located.

The mounted attack against machine guns is best made by foragers charging from various directions at the same time.

663. When in a cavalry engagement it is a question of preventing the destructive action of machine guns against our cavalry masses, relatively small bodies—several platoons or at most squadrons—are detached to occupy the attention of the machine guns and draw their fire. They disperse as foragers on a wide front and attack from various directions as soon as possible.

DISMOUNTED COMBAT.

(See also F. S. R., "Combat.")

664. Dismounted action, offensive or defensive, is resorted to whenever the tactical situation or the nature of the terrain prevents the Cavalry from accomplishing its assigned mission by mounted combat.

Careful instruction and training are necessary to inspire leaders and troops with confidence in the rifle.

Half-hearted measures seldom attain success in war; lack of determination is a fruitful source of defeat.

The object of a combat will be attained with less difficulty if the enemy can be deceived as to the nature and strength of the troops engaged.

665. The mobility of Cavalry enables it to attack suddenly from various directions and to effect a rapid deployment and development of fire. Consequently it is able to deal blows at the enemy's flank and rear before he has time to meet them, or can overwhelm the head of his column with fire before he can make adequate deployment.

Rapidity of action and surprise are, therefore, important factors in dismounted action. When a surprise has been effected the Cavalry should develop its full strength without delay.

666. Flank protection is of special importance; it can usually be obtained by occupying strong positions on the flanks, by taking advantage of natural or artificial obstacles, and by far-reaching use of patrols.

667. The number of rifles to be placed in the firing line depends on tactical considerations; the proportion of troops to be dismounted, whether three-fourths, or practically all, is controlled by the degree of mobility desired for the led horses, the nature and extent of cover available for them, and in some cases on the degree of promptness of action demanded.

668. The question whether it is more important to develop a firing line of maximum strength than to retain the ability to resume mounted action quickly, must be decided according to the circumstances of each case.

669. Dismounted combat, whether offensive or defensive, should whenever possible, be preceded by a personal reconnaissance made by the commander.

670. The following are examples of situations in which dismounted action may be required:

(a) In an inclosed, wooded, rough, marshy, or inundated country, where mounted action is impracticable; for example, villages, bridges, defiles, ravines, hedges, wire and other fences, field works, entanglements, abattis, rice fields, etc. Also in level and open country, swept for long distances by effective fire of the enemy.

(b) To force a position and clear the way for further advance; to seize a point of support, or to occupy a defile under circumstances not permitting delay.

(c) To attack a line of outposts for reconnaissance or to prepare the way for penetration by a mounted force.

(d) In a pursuit, to occupy positions on the enemy's line of retreat.

(e) Participation in a general engagement, especially in connection with turning movements.

(f) To seize and defend important positions at a distance from the main body of the Army until the arrival of Infantry.

(g) To hold positions for flank protection, or as a pivot of maneuver for a mounted attack.

(h) As support to horse artillery and machine guns.

(i) To replace Infantry in position prior to a withdrawal.

(j) To defend a line against enterprises of the enemy; defense of villages, camps, and cantonments.

(k) To reenforce hard-pressed portions of the line of battle, or to check a turning movement.

(l) During a retreat to delay the enemy by compelling him to leave the road, deploy across country, and make a formal attack.

(m) When Cavalry is greatly outnumbered by hostile Cavalry and the country is suitable for dismounted action.

THE ATTACK.

671. Cavalry will often be forced to make a dismounted attack to open a passage for further mounted advance. Enterprises against the enemy's communications, destruction of railroads, depots, magazines, etc., will frequently call for fighting on foot.

The attack should be pushed as rapidly as possible for the double purpose of arriving at a decision before the enemy's reserves can get into action and of recovering mobility with the least practicable delay.

672. When the strength of the enemy is known, the force designated for the principal attack should ordinarily be strong enough from the start to carry the position. Before a shot is fired the commander should know what he wants to accomplish and inform his subordinates accordingly. Such movements as he may contemplate should be embodied in his *plan of action*.

673. As long as the situation has not been cleared up, the bulk of the forces must be held back to await developments. But, when the time for the decisive attack has come, it would be a serious error to launch an inadequate force, with the idea of reenforcing it gradually.

674. As a general rule relatively weak forces, widely extended, are deployed against the enemy's front, the principal part being kept in hand for attack and envelopment of a flank, or, when the flanks are strongly protected, for a concentrated effort against a weak point in his line. Deployment on a wide front tends to cause dispersion of the enemy's fire while it favors a convergence of fire for the attack and permits its concentration on the principal objective. To a considerable extent it also serves to protect the led horses. An attempt to turn both flanks is warranted only in case of decided numerical superiority.

675. The cavalry commander should not seek a fight to a decision unless he is sure of superiority. Neither will he make a frontal attack across a field of fire selected by the enemy, if it can be avoided. By virtue of its mobility Cavalry can select and arrive at ground favorable for the attack, and can start and develop turning movements faster than an enemy on foot can meet them.

676. Except when assigned as reserve, brigades in a division, regiments in a brigade, and squadrons in a regiment are deployed side by side. They provide their own supports and endeavor by this method to restrict the mixing of units. Articulation in depth will vary with the size of the command, the extent of the enemy's position, the depth of the fire-swept zone and the amount of resistance expected.

677. A continuous firing line is not generally desirable. In many cases it will be better to operate in groups, in order to avoid ground affording no cover.

678. In special cases a dismounted reserve will be necessary, in order to have a force available when, in the course of the engagement, the enemy's weakness is developed, or the decisive point for attack is recognized.

679. The density of the whole dismounted deployment for the main attack will vary according to circumstances; for a regiment it should ordinarily be not less than two men per yard of front. After allowing for a mounted reserve, a regiment dismounting three-fourths of its troopers could provide this density for a line equal to about one-half of its front mounted.

A mounted reserve will be designated in all cases.

680. Horse Artillery and machine guns are placed in positions from which they can combine their fire with that of the firing line, preferably with oblique or flanking effect.

THE COURSE OF THE ATTACK.

681. The preliminary measures of the *preparatory stage* are often of decisive importance.

The commander, accompanied by subordinate leaders and staff officers, reconnoiters the enemy's position and the adjacent ground; the troops in the meantime remain under cover. Having arrived at a decision as to the objective and the direction of attack, the commander leads his troops to the position for deployment. In the mean time a more detailed reconnaissance of the enemy's position is made by subordinates. As far as practicable, the movements in the deployment itself should still be made mounted.

682. The decision to attack should be followed promptly by the commander's *attack order*, before conditions have time to change.

This order designates the troops for the secondary attack, the main attack, and a dismounted reserve. It gives instructions for all parts and arms of the command and endeavors to secure their cooperation in the decisive action.

Ammunition supply, the size of the mounted reserve, and the position of the led horses are prescribed when necessary. Troopers going into dismounted action should carry not less than 150 rifle cartridges on the person.

683. The Horse Artillery ordinarily opens the fight, facilitates the advance of the skirmish lines, and helps to develop the situation. The time for the decisive attack, however, must not be made to depend on the results of artillery fire alone.

684. The mounted reserve not only takes charge of the protection of the led horses, but continues reconnaissance during the engagement. When practicable it attacks the enemy's posi-

tion in flank. If the combat is against dismounted Cavalry, it endeavors to defeat the mounted reserve and to capture the led horses.

685. The attack consists in carrying forward the firing line, the attainment of fire superiority, and the eventual ejection of the enemy from his position by a charge.

686. The cavalry spirit manifests itself in dismounted action by an irresistible determination to advance. Officers and non-commissioned officers must, by personal example, carry their men forward from position to position.

687. As the supply of ammunition is limited and can not be readily replenished during the action, opening of fire by the skirmish line should be delayed as long as possible. Even in fairly open country the fire attack should not begin before mid range, if it can be avoided.

688. Whenever practicable the initial deployment, consisting of a strong firing line with supports, will be made within effective range of the enemy's position. When cover is lacking it will often be necessary to advance to the firing position in a succession of thin lines, or in lines of squads in column of files. The fire attack is then begun after the firing line has filled up.

689. The commander of the attacking force assigns portions of the enemy's position as objective and designates the time for opening fire. Squadron and platoon commanders assume the direction and control of fire. When no objectives are assigned the squadrons operate toward their own front. The time for opening fire may be left to the senior officer with the firing line. *The platoon is the habitual unit of fire.*

690. Specially effective fire of Artillery or machine guns, or other circumstances, may permit the advance of the entire line from the initial firing position, but as a rule, further progress can be effected only by rushes. Between the rushes a deliberate and well-aimed fire must be kept up.

691. The distance of the supporting groups from the firing line will vary according to the stage of the action and the amount of cover available. On principle they are as close to the firing line as practicable, approaching it as they are likely to be needed; in any event, they must be at hand for decisive action.

692. The squadrons close in on their centers as they become depleted by casualties during the advance. To keep up the strength of the firing line, maintain its morale, and give it an impulse forward, considerable fractions of the support are sent into

gaps in the firing line, preferably under cover of a heavy fire by the troops engaged. When this method of reinforcement is impracticable, which in battle will generally be the case, the deployed supports must mingle with and thicken the firing line. Eventually the firing line should contain as many rifles as can be used effectively.

693. After the firing line has gained superiority of fire and has worked up close to the enemy's position, a charge may still be necessary to drive him out and complete his defeat.

The arrival of the proper moment for the charge depends upon so many circumstances that it can not be predicted far in advance. It may be recognized by leaders in the firing line, or by superiors in rear.

Before ordering a charge the commander should see that there are enough troops on hand to make it a success. The charge is made simultaneously if possible by all parts of the line. When the commander sees that some of his troops are about to charge he should cause the sounding of the call at once.

It is preferable to make the charge over a short distance only. Troops arriving in the enemy's position badly blown are not in good condition for a *mêlée* or for further firing.

694. If the charge has been successful the troops must advance sufficiently to be able to fire upon the retreating enemy. Horse Artillery and machine guns hasten to the front for the same purpose. The mounted reserve takes up the pursuit.

695. As soon as the position has been captured the commander will give thought to remounting all the troops not needed to hold the position. The led horses are brought up at a rapid gait, or the troops march back to them, part at a time.

696. When two opposing forces of Cavalry come within range of each other, but are separated by impassable obstacles, such as streams or ravines, or by obstacles delaying their movements, such as wire fences, the force which opens fire first will have a decided advantage and may compel a numerically stronger enemy to retreat to cover or out of range.

697. Unexpected appearance and simultaneous opening of fire by a body of troops is called a *surprise by fire*. Cavalry commands are well adapted to this kind of action, and by making skillful use of the ground and taking advantage of their mobility, may inflict serious losses on, and shake the morale of opposing forces.

As soon as the intended results have been attained, the command should withdraw rapidly before the enemy can develop a counter

attack with superior forces. Combat patrols must be specially active to insure ample warning of movements threatening the flanks.

In attacks of this kind it is very desirable to have cover for the led horses close at hand. As many rifles as possible should be put into action from the beginning.

The fire of Horse Artillery and of machine guns gives the maximum power to surprise attacks of this nature. In some cases the Cavalry, mounted or dismounted, is used only for the protection of horse artillery or machine guns to enable them to gain positions from which to overwhelm the enemy with sudden fire.

THE DEFENSE.

698. A position defended by effective rifle fire is so strong in front that it can be held by a comparatively small force. The weakness of a defense by dismounted cavalry lies in the flanks and in the necessity of protecting the led horses.

With the ample supply of ammunition which must always be available, dismounted troopers should be imbued with the confidence that they are able to cope with several times their own number.

699. The first requirement of a good position is a clear field of fire to the front and exposed flanks for a distance of about half a mile. The length of front should be suited to the size of the command, and the location of the position should be such that the enemy must attack or abandon his plans.

700. If a stubborn resistance is to be made, there should be no dead spaces for several hundred yards to the front. Cover for supports and reserves and good facilities for communication in rear are highly desirable; impassable obstacles on the flanks add greatly to the security of a position.

701. Places for horse artillery and machine guns must also be taken into consideration; the importance of their rôle may have the controlling influence in the selection of the position.

702. A continuous line is not necessary; defense by combat groups will be the rule. The best ground for defense can thus be selected and the enemy also be deceived as to the strength of the forces confronting him.

An extended position is so divided into sections that each has, if practicable, a field of fire made distinct by the terrain. Unfa-

vorable and unimportant ground will ordinarily cause gaps to exist in the general line of defense.

The commander assigns to subordinates the front to be occupied by their commands. These, in turn, subdivide the front among the next lower units of the firing line.

703. The density of the deployment—firing line and supports—depends upon the number of troops available, the severity of attack expected, and many other factors. In exposed positions, the firing line should be as heavy as in the attack, not less than two men per yard of front; when the position is intrenched and has a good field of fire, less strength may serve the purpose.

704. Whether a dismounted reserve is to be detailed depends upon the instructions and intentions of the commander; when a stubborn resistance and possible counter attacks are contemplated, such a force will be necessary.

705. The front may be strengthened by machine guns. Usually machine-gun platoons are well placed in the protection of the flanks, or in positions from which they can enfilade the advancing enemy. It will often be of advantage to hold the machine guns in reserve, or at least to withhold their fire and not disclose their position until the enemy's main attack is under way.

706. The Horse Artillery should be placed in positions from which it can fire upon the enemy in the early stages of his advance and deployment, and also cover the terrain well around the flanks. While ordinarily a battery should not be divided, occasions may arise where the assignment of platoons, or even single pieces, for special purposes is indicated.

707. When time and means are available the position should be fortified. This work will usually be limited to the simplest means, such as demolitions, obstructions, and construction of rifle pits or sections of fire trench. Buildings and walls heavy enough to afford protection against rifle fire and shrapnel may be included in the line of defense, especially if they extend the view and enlarge the field of fire.

Engineers may be called upon to assist in demolitions and in construction of defenses.

708. The most effective protection against artillery fire is concealment; every effort should be made to secure it and to deceive the enemy as to the location of the main defenses. If possible, the position should be viewed from the direction of the enemy to ascertain whether the measures for invisibility and deception are effec-

tive. Ranges should be measured and marked and troops made familiar with the distances.

709. Detachments for protection of the flanks are placed in echelon. Whether they shall be mounted or dismounted will depend upon circumstances and the nature of the ground. After repulse of the enemy such detachments are available for immediate assumption of the offensive and pursuit.

710. The led horses must be placed so as not to come under effective fire. A fold in the ground will shield them from rifle fire, but concealment, through overhead cover, is the best protection against discovery by aerial reconnaissance and the curved fire of artillery.

711. When practicable the led horses are united in groups at points conveniently accessible by their units, which should always remain informed as to their location. Distance from the firing line is also influenced by the probable duration of the combat.

712. A mounted reserve will be necessary in most cases. Its duty is to keep up reconnaissance, to protect the flanks, and to guard the led horses against bold strokes by the enemy.

The mounted reserve may also be used to attack the enemy's led horses and to assist in the withdrawal of firing lines, in which case it may act mounted or dismounted.

713. The supports are placed as close to the firing line as practicable and reenforce the latter as the crisis of the attack approaches. When there is no cover available, the supports may be put into the firing line from the start.

714. The dismounted reserve should be so posted as to be entirely free to act as a whole, according to developments. It is used to protect the flanks against enveloping movements, to make a counter attack, or to cover withdrawal of the firing line. As far as possible it should be concealed and under cover, so that its action may be in the nature of a surprise.

715. The commander controls the opening of fire. This may take place at longer range than in the attack, especially if the action is intended for delay only.

If the enemy has powerful artillery it will often be best to withhold fire until a specially favorable target appears. Vigorous and well-directed bursts of fire should then be employed. During the initial stage of the enemy's advance and before his plans are developed, only a small number of troops need be in the trenches. The remainder may be kept under cover, if near at hand, and sent to

their places as needed, thus avoiding premature disclosure of the main position.

716. Villages and groups of buildings are defended from the edge or from positions beyond the edge, as determined by the field of fire.

When troops are quartered in towns the led horses must be placed in safety if possible. The principal entrances should be barricaded and the edge of town prepared for defense.

717. For the defense of defiles and obstructions fire positions should be chosen so as to bring a specially effective fire to bear upon them and the surrounding terrain, and also upon distant approaches. The trenches should be fully manned as soon as the enemy appears, in order to establish superiority of fire from the start.

When it is necessary to defend a defile at the end toward the enemy, the horses should generally be kept in rear.

718. In fighting delaying actions all measures tending to deceive the enemy are of increased importance. Suitable preparations to facilitate the movement of troops to the rear and to delay progress of the enemy should be made beforehand.

BREAKING OFF AN ENGAGEMENT AND LEAVING A POSITION.

719. The difficulty of breaking off an engagement or of leaving a position increases with the progress of the action.

At long range an attack can be abandoned without serious loss; at mid-range this is only possible when the ground is specially favorable. When the attack has advanced close to the enemy it is generally best to carry it through.

Under effective fire at close range the defenders of a position can not withdraw without destructive losses, unless protected by cover or by the fire of other troops participating in the engagement.

720. When leaving a position is contemplated, whether to advance or retire, the enemy should be kept in ignorance of this purpose as long as possible. If the firing has been in bursts, with intervals of silence, the fact that there is no firing will not indicate evacuation of the position. The movement, therefore, should take place immediately after a burst of fire.

721. In withdrawal from a position the degree of mobility of the led horses and their location are important. To avoid confusion the retiring units may be met by guides; the led horses should be placed so as to be easily mounted and ready to move to the rear. The best line of retreat, for speed and cover, should be determined in advance and obstacles likely to cause delay be removed.

722. Part by part withdrawal from a defensive position, under cover of bursts of fire from the parts remaining, is often advisable. The troops at the greatest distance from their horses, and those having the least cover in their rear, should be among the first to be relieved, while those with horses close at hand and having cover immediately available, should hold on to the last.

723. Troopers should be able to remount and gallop out of range while a foot soldier passes over 300 yards of fairly good ground. When the ground in front of the position is heavy, or when obstacles delay the enemy under fire, even greater proximity of approach than 300 yards may be permitted, provided the ground in rear of the position affords good cover, continuous within effective rifle range.

724. When a retreat becomes unavoidable the horse artillery and machine guns must keep up their fire on the advancing bodies of the enemy as long as possible, even at the risk of capture.

725. Attacks of the mounted reserve against the flanks of the pursuing enemy, whether made mounted or dismounted, will materially facilitate the retreat.

726. As the troops return to their horses they remount at once and ride at rapid gaits beyond reach of the enemy's fire. Horses left without riders are led along.

The direction of retreat and the formation and gaits of the troops are governed by the force of circumstances and previous instructions, which may also indicate a place of assembly.

727. If defensive combat is to be continued in retreat with a view to delaying the enemy, the commander must keep his troops well in hand and place them in a succession of defensive positions affording mutual support, and which the enemy is compelled to attack or turn. See also "Rear Guard in Action," F. S. R.

HORSE ARTILLERY AND MACHINE GUNS.

728. Horse artillery and machine guns add greatly to the power of cavalry, both in attack and defense.

All cavalry officers should possess a general knowledge of the powers and limitations of these weapons in order that the maximum benefit may be derived from their tactical association with cavalry commands.

729. In combined action against hostile mounted troops fire will mostly be furnished by horse artillery and machine guns. On the defensive, they will greatly strengthen a position; in delaying

actions they can force an early deployment. They are able to disturb the march of columns of all arms at long range and to drive the enemy off his line of advance. In a surprise by fire they play a leading part, and they assist reconnaissance in causing the enemy to show his forces. By their fire they may break up resistance at defiles and in occupied positions, thus saving the cavalry a dismounted combat.

730. On the march horse artillery will usually be near the head of the main body; across country, it will hold itself near a flank and approximately abreast of the main body. Whenever possible it should be kept on a road.

While ordinarily horse artillery is not attached to the advance guard, one or more batteries should be used freely for reinforcement of the advance guard in case of a check by hostile troops; and, in anticipation of such use, some horse artillery may temporarily follow the reserve of the advance guard.

Machine guns remain with their regiments, unless brigaded or otherwise assigned according to the principles governing the assignment of horse artillery.

731. In combining shock and fire action the attacks must be correctly timed and must not interfere with each other. To fulfill the first of these conditions it may be necessary for horse artillery and machine guns to push boldly to the front so as to get into action at the most suitable time; while to fulfill the second there must be sufficient lateral separation so that up to the moment of collision the fire of the guns will not be masked.

732. The chiefs of horse artillery and machine guns must act on their own initiative and be ready to seize all opportunities for effective action against the enemy, in accordance with the general instructions of the cavalry commander. They remain with him until their commands are assigned to a definite mission, and and later on maintain communication. The cavalry commander, for his part, should keep them informed as to his plans and intentions.

733. The cavalry leader indicates the time for the first deployment and the approximate position for horse artillery and machine guns to suit his tactical plan, but the exact places and the time for opening fire he leaves to the judgment of the commanders of those units.

734. On principle, fire should be directed against such parts of the enemy's forces as have direct influence on the outcome of the engagement. A duel with hostile artillery does not promise

immediately decisive results. However, when the enemy's artillery exposes itself, rapid and effective advantage may be taken of the circumstance; it may also be necessary to fire on the enemy's artillery to withdraw his fire from our own Cavalry.

735. During a cavalry battle the horse artillery will concentrate a rapid and well-aimed fire against that portion of the enemy's cavalry against which the decisive charge is about to be delivered in order that it may be thrown into confusion. As soon as such fire becomes masked by the cavalry advance, the guns should be directed against the enemy's supports and reserves, if any are coming up, or against his artillery.

736. When mounted cavalry attacks foot troops or artillery, the leader will endeavor to charge them in flank. On such occasions rapid and effective fire of horse artillery should hold the enemy in place and prevent him from changing position to face the advancing Cavalry.

737. Assembly of the batteries facilitates fire leading. Separate positions for machine-gun platoons are not generally advisable. When there are several lines of fire the movements of the Cavalry are hampered, or the latter will mask the fire of some of the positions. However, the nature of the country, or circumstances of the engagement, may make separate positions necessary.

738. The protection of the Artillery falls to the nearest troops; they detail an escort when necessary, or upon request of the artillery commander. The escort commander exercises his judgment as to the tactical handling of his command, but must act in concert with the artillery commander and is responsible for the safety of the batteries. Machine guns do not require an escort except in very close country. The cavalry escort may act dismounted. The Artillery protects itself against surprise by using its own patrols.

739. Except in urgent cases the Artillery going into position will take advantage of cover. In order to follow the rapidly changing aspects of a cavalry battle the Artillery must usually be in positions enabling it to use direct laying. To escape the destructive fire of hostile artillery already in position, or to act in combination with dismounted Cavalry, positions under cover may be advisable.

740. In battle the batteries of horse artillery remain with their cavalry commands, since they are indispensable during and after the action. In a general engagement, however, a large part of the horse artillery can frequently be used to advantage in rendering

temporary assistance to other troops; it must always remain at the ultimate disposition of the cavalry commander.

741. In a cavalry battle horse artillery and machine guns at first support the deployment and then the attack.

A position toward a flank, or for machine guns, forward and to a flank, permits fire to be continued until just before the shock, and also to be directed against the enemy's flanking movements. If the position taken is on high ground, firing over the heads of troops can be continued for a longer time. There should be no hesitation about such fire within proper limits, and the troops should appreciate the necessity therefor. The time required to make the necessary lateral movements may cause the artillery and machine guns to miss their opportunity, besides cutting down the length of time in action. In many cases it will therefore be of advantage for the horse artillery and machine guns to go into position near the line of advance, and for the cavalry command to maneuver toward a flank. The horse artillery with its escort—and with frequently all or part of the machine guns—thus constitutes a pivot of maneuver from which, by far-reaching fire, it serves to facilitate and protect the deployment of our masses of cavalry, and also to interfere with the enemy's deployment and to break up his formations at the decisive point of attack.

742. Positions secure against direct attack are desirable, but artillery and machine guns will often be forced to go into immediate action without regard to cover and other advantages.

743. If the attack succeeds, the horse artillery and machine guns act on their own initiative and, if necessary, advance rapidly to positions from which they can pursue the enemy with fire and prevent him from rallying his units for renewed resistance.

744. Should the attack fail, it is the duty of the Artillery and machine guns to check the enemy's pursuit and cover the withdrawal and re-forming of the Cavalry. In carrying out this function the Artillery must not hesitate to risk losing their guns. The Cavalry in falling back should be careful not to mask the fire of their batteries.

745. When dismounted action of cavalry is contemplated, whether in attack or defense, the use to be made of horse artillery and machine guns is always among the first things to be considered.

To make a dismounted attack the cavalry commander will usually take advantage of his mobility to move against the enemy's flank and to gain positions for enfilade fire. To meet these opera-

tions the enemy must expose himself and he then becomes a profitable target for artillery fire.

During a dismounted attack an overwhelming artillery fire should be directed against that part of the enemy's position which is to be charged.

When the position has been captured, Artillery and machine guns advance rapidly to positions from which they can fire effectively on the retreating enemy.

746. In a defense by dismounted cavalry the cavalry commander will in most cases order the opening of fire; to fire prematurely would betray the position to the enemy.

If the defense fails, Artillery and machine guns must endeavor to cover the retreat by directing their fire against the pursuers, without regard to the enemy's artillery fire.

747. In a retreat, the horse artillery and machine guns will, from successive positions or "pivots of maneuver," support the fire of the dismounted defense, or cover the formation and assist the charge of the mounted forces in counter attacks.

NOTE.—For details of the tactical employment of machine guns, see Cavalry Machine-Gun Regulations.

THE PURSUIT.

748. After a successful battle relentless pursuit is imperative in order to gather the fruits of victory. It should be continued with the utmost energy until complete disintegration of the enemy's forces is accomplished.

749. The pursuit is the special duty of the Cavalry. The vigor and persistence of its efforts will depend to a large extent upon the condition of the horses, a fact to be remembered by Army and cavalry commanders during the earlier stages of the action.

750. As a general engagement approaches conclusion, all bodies of cavalry, large and small—including divisional cavalry—hasten toward the front so as to be immediately available for prospective duties. After a victory the mass of the Army can dispense with the services of the Cavalry temporarily.

751. When the ground is so difficult that large bodies of cavalry can not pursue as a whole, the division commanders will indicate the general direction of advance and leave it to brigade and regimental commanders to gain contact with the enemy. On such occasions the rule is to attack whenever possible, and it is better to charge in small units than to do nothing. The constant effort

of all commanders of Cavalry must be to remain at the enemy's heels and keep him moving.

752. The direct pursuit is initiated by the troops engaged in the battle. As the enemy begins to give way the cavalry masses available near the flanks of the Army will advance in lines parallel to the direction of retreat. Their endeavor will be to pass the enemy's masses or retreating columns, to fire into or charge them in flank again and again, to force them off their lines of retreat, to anticipate them at defiles and bar their progress, to destroy bridges, to break up their trains—in short, to attack whenever a condition of disorder offers a chance of success. By taking up a position across the enemy's line of retreat, the Cavalry, if in sufficient force, may bring the enemy to a halt and thus gain time for the pursuing Infantry to come within striking distance.

753. Whenever portions of the enemy endeavor to hold their ground they must be outflanked repeatedly. This constant overlapping must be kept up day and night, regardless of the fatigue of men and horses. A pursuit thus carried to the utmost may save the Army another battle and terminate the whole campaign.

754. A direct pursuit from the battle front usually can not be undertaken by cavalry until the pursuit by fire has ceased. Beyond the reach of infantry fire of pursuit, the Cavalry must seek to prevent the enemy from re-forming his organizations and starting them on the roads in columns of route. If such columns have already been formed, the Cavalry will conduct a parallel pursuit as previously explained.

755. The commander-in-chief should be kept informed of the progress of the pursuit and the location and condition of the enemy's forces by messages from the cavalry commander.

THE RETREAT.

756. When the outcome of a battle has been unfavorable and a withdrawal is necessary, it is the duty of Cavalry to delay the enemy by energetic action—to the extent of self-sacrifice if necessary—and thus facilitate the retrograde movements of the other arms. A small gain of time is of great importance to troops temporarily in disorder and may serve to avert complete disaster.

757. The commander will determine in accordance with the features of the ground and the urgency of the situation whether delay can best be effected by occupation of successive positions or by flanking the enemy's advance, and whether mounted action, a

combination of shock and fire action, or fire action alone promises to be most effective.

758. The presentation of a bold front and the assumption of a vigorous offensive by the Cavalry of the retreating troops may deceive the enemy as to the extent of the reverses suffered and can not fail to impress him with the power of resistance still available.

759. The principal object is to delay the general advance of the enemy's forces. Frequent and bold attacks and deception as to the nature of the troops confronting him will be effective means to this end. If the pursuers can be surprised by fire or caught in ambush, it will render them cautious, which means gain of time.

760. Special precautions should always be taken to look out for and secure the flanks and to gain information of attempts at parallel pursuit by the enemy. The retention of a substantial portion of the command for use in emergencies is essential.

761. Throughout the retrograde movement the Cavalry should keep the commanders of the retreating troops acquainted with the movements of the enemy's columns; assurance of lack of progress on the part of the enemy will remove anxiety, restore confidence, and contribute greatly toward reorganization of tactical units.

THE CAVALRY DIVISION IN A GENERAL ENGAGEMENT.¹

762. A Cavalry division attached to an army always has important duties to fulfill on the field of battle.

During the operations the commander must keep himself informed as to the enemy's movements, the progress of the engagement, and the position and movements of troops in his vicinity. He asks for orders from higher authority and, failing to receive any, acts on his own responsibility when circumstances indicate operations suitable for his command.

As the general lines of battle come into contact the bulk of the Cavalry will clear the front by passing around the flanks or through gaps in the line and take position near a flank or in rear of the center.

763. The duty of a cavalry division in battle is to operate against the enemy's flank and rear, to attack shaken infantry or unprotected artillery, to guard the flanks of its own army, and to

¹ The principles governing the duties of the cavalry division in a general engagement apply equally to smaller or larger bodies of cavalry placed under similar conditions.

delay or drive off hostile reinforcements. Continued reconnaissance is necessary to give timely warning of enveloping and turning movements on the part of the enemy. At the conclusion of a battle the division takes up the pursuit or covers the retreat.

764. Opportunities for cavalry action are most frequently found near the flanks of the line of battle. A position in advance of a flank facilitates participation in the general battle and of itself acts as a menace. It also is favorable for the purposes of reconnaissance. From such a position it may be possible to attack the enemy's reserves or surprise his ammunition train, thus causing serious interference with his operations. In the achievement of such successes more important duties must not be neglected.

765. If the enemy's cavalry force is encountered on the same flank, the first endeavor must be to engage and defeat it in order to gain freedom for further enterprises. When the enemy's cavalry makes use of infantry supports to occupy strong positions, whether in the form of Mounted Infantry or Infantry transported on bicycles, automobiles, or wagons, the commander will decide whether it is best to attack them at once with dismounted Cavalry, Horse Artillery and machine guns, or to isolate them by passing around, leaving them to be dealt with after dispatching the hostile cavalry.

766. In rear of the center the cavalry division is usually held in reserve. It may be called upon to overcome crises in the battle by charges to the front in deployed lines, to provide dismounted reinforcement to a depleted firing line, or to move rapidly to threatened points to cope with unforeseen emergencies. Its mobility may be utilized to bring the power of its fire to bear on the enemy in unexpected places and thus exercise an important influence on the course of the battle.

767. When the forces of Cavalry with an army exceed the strength of a division, they may be organized as a Cavalry Corps. In any event when large forces of Cavalry are assembled or operate together on any part of the field their harmonious cooperation should be secured by formal assignment of a chief.

768. The duties of the *divisional cavalry* in reconnaissance, protection, screening, and delaying actions will lead to combats, both mounted and dismounted.

In a battle its action will be similar to that of a cavalry division, but reconnaissance remains its most important duty. It may take part in the great cavalry battles by temporarily joining the cavalry division or larger body, either pursuant to orders or on its own initiative.

RAIDS.

769. Raids are isolated operations carried out by forces composed exclusively of mounted troops.

The object of a raid, in the general case, is to strike the hostile army in the arteries upon which it depends for the flow of ammunition, reinforcements, food and supplies of all kinds indispensable to its efficiency.

770. Raiding operations are most feasible when the troops are familiar with the country they are to traverse, for example, after invasion by the enemy, and when information as to position and movements of hostile forces can be secured through sympathizers, as in civil war, or in friendly territory. In the enemy's country, the opposite conditions usually prevail. Difference in language, widely disseminated systems for electrical transmission of intelligence available to the enemy, and various means for rapid transportation of his troops contribute to lessen the opportunities for extended raids in civilized foreign countries.

In partly civilized or sparsely inhabited countries, with weak governments and inefficient military forces, raids are subject to less risk and may be carried out for political reasons, or for some special purpose of minor importance.

Raids are permissible only when cavalry can be spared from its usual duties and when its presence with the army at critical junctures is not jeopardized by temporary absence on a raiding expedition.

771. The object of a raid must be both definite and adequate; definite, in order that the commander may make suitable plans and preparations and carry out the operations with the directness, celerity, and energy necessary to success; adequate, so that the results expected will outweigh the losses and depreciation of men and horses.

An alternative objective is desirable, so that if it proves impossible to attain the principal object, accomplishment of the second will still be a success.

772. As surprise and rapidity of action are essential factors, small forces will often succeed where large ones would fail. The character and extent of the work and the amount of resistance expected help to determine the size of the raiding force.

773. The best troops, well-seasoned and self-reliant, should be selected, weak men and horses being eliminated from the designated units before starting. Horse Artillery and machine guns

may be used with great advantage on a raid; a reserve supply of ammunition will have to be provided.

774. Wheel transportation should be reduced to a minimum, for it may have to be abandoned during the raid. Pack transportation is preferable, and in some countries no other kind can be taken.

775. In addition to the explosives usually carried by the Cavalry, a mounted section of Engineers with the necessary equipment should accompany the command to carry out the more extensive demolitions.¹

776. For subsistence a raiding force will ordinarily count upon what can be carried on the horses, and upon the resources of the country. On extended raids, and to meet emergencies resulting from delay, reserve supplies for a few days should be carried along.

Preparations for a raid should be complete as to essential details. Good maps are indispensable, and well-informed guides should, if possible, be secured.

777. The success of a raid depends in a large measure upon the skill, good judgment, and resolution of the leader. The command must move rapidly and secretly. As a raiding force has no communications it is free to move in any direction. It should avoid serious combat except when necessary to accomplish its object or cut its way out. As far as possible, the enemy should be kept in ignorance of the position of the main body of the raiding force and of its destination and object of attack, and efforts should be made to deceive him as to future movements, especially as to the route of return.

¹ Detailed instructions for demolitions are found in the Engineer Field Manual.

CAMPING.

THE PLATOON.

778. The platoon camps in line.

SINGLE RANK.

If the horses are to be secured to a ground line the platoon first forms single rank to allow the necessary room.

At the command for dismounting (given without recounting fours) the front-rank men ride out 4 yards, all dismount, the front-rank horses are turned left about, led back, and coupled with those of the rear rank.

Rifles are stacked 5 yards in rear of the horses of the rear rank.

The sabers and the rolls of the shelter halves are then taken from the saddles and the shelter tents pitched with their open ends facing the horses and 1 yard in rear of the stacks of rifles.

The picket line is then put together and stretched in front of the horses (on the side opposite the tents).

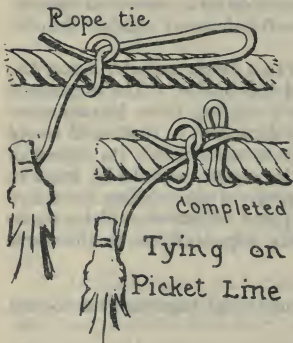
When the picket line has been secured, the bits are removed and the horses are tied on the line, the girths being loosened and the saddles left on until the backs are

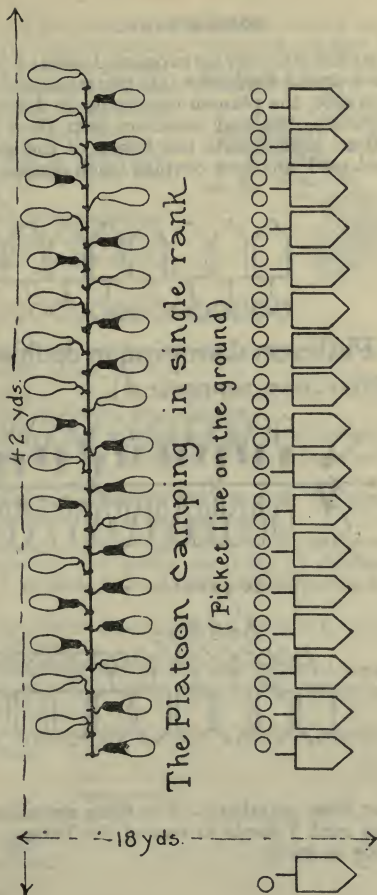
cooled; the horses being watched to prevent their rolling.

Knot for securing the halter rope to the picket line.

The saddles are then removed and placed on the ground in front of the shelter tents, and the saddle blankets are spread on them to dry. On unsaddling, if the ground is suitable, the horses are encouraged to roll, being untied from the line for the purpose.

The rifles are then taken from the stacks and placed in the shelter tents.

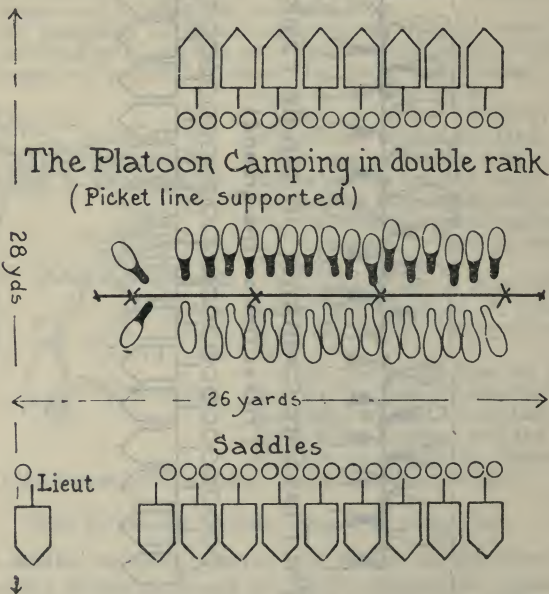




DOUBLE RANK.

779. If the picket line can be supported about 4 feet above the ground, so as to separate the horses into two ranks and prevent their crowding on one side, the platoon may camp in double rank.

After dismounting, the odd numbers turn their horses to the left about and lead back beside the horses of the even numbers; the horses of each rank are then coupled (each couple being formed



of an odd and an even number). The rifles are placed in stacks, those of the rear rank 5 yards in rear of the horses, those of the front rank 5 yards in front.

The sabers and the rolls of the shelter halves are then taken from the saddles and the shelter tents are pitched in two ranks on opposite sides of the horses, with their open ends facing them and 1 yard farther from them than the stacks of the rifles.

The picket line is stretched over supports between the two ranks of horses.

The front-rank horses are then tied at the front side of the line and the rear-rank horses at the rear side.

Picket Line Supported Anchored in ground



THE SQUADRON.

780. The squadron camps in column or in line; the platoons camping as though alone.

Before camping in line in single rank, the platoons all move up on a line with the directing platoon.

Before camping in line in double rank, the platoons take 6 yards interval to allow room for passages between the raised picket lines of the platoons.

Before camping in column in double rank, the platoons take 10 yards more distance to allow camping room.

In camping in line, the picket lines of the platoons are each secured independently and when camping in double rank a free passageway of 2 yards is left between the supported picket lines of the platoons.

When a heavy picket line is carried, it will be in four sections, one for each platoon.

The kitchen and the tent of the first sergeant are on one flank; the officers' tents on the same flank. The forage and the sinks are on the other flank.

781. Space required for squadron camp (minimum, allowing room for cook fires):

Formation.	Front.	Depth.
	Yards.	Yards.
In column, single rank.....	50	70
In column, double rank.....	35	110
In line, single rank.....	170	20
In line, double rank.....	110	30

THE REGIMENT.

782. The regiment camps in column, in column of squadrons (each in line), or (with increased intervals) in mass.

Each squadron camps as though alone except that in mass the squadron officers, the first sergeant, and the cook fires are in front of the squadron and the sinks in rear.

In column of squadrons the distances are reduced about one-half before camping.

The tents of the colonel, his staff, and the field officers are beyond those of the squadron officers.

Space required for regimental camp (*minimum* for 6 squadrons):

Formation.	Front.	Depth.
	<i>Yards.</i>	<i>Yards.</i>
In column, single rank.....	60	420
In column, double rank.....	45	670
In squadron column, single rank.....	180	120
In squadron column, double rank.....	120	180
In mass, single rank.....	240	100
In mass, double rank.....	150	140

These distances do not include space for the machine-gun unit, which camps in rear of the regiment.

GENERAL PROVISIONS.

(See also F. S. R.)

783. In order to get the greatest benefit from the meager camp equipment carried, the dispositions in camp must be adapted to the ground. The camp will, therefore, seldom be ideally regular.

Even in small commands the commanding officer or an officer designated should precede the column to look over the camping ground and decide on the arrangement of the camp, so that on the arrival of the head of the column each squadron may occupy immediately the ground assigned it and the squadron commander be informed as to arrangements for water, fuel, forage, etc.

On arriving in camp, sinks are dug at once and are concealed by bushes; they are covered daily with fresh earth.

In a hostile country the camp should not, as a rule, be within rifle shot of cover for the enemy. Orders are given as to the place of assembly and other dispositions to be made in case of a night alarm; in each platoon men are designated beforehand to go at once to the horses and take charge of them.

When time permits, a shallow ditch is made around each tent and channels made to carry off the water.

784. Men should not be required unnecessarily to sleep on the bare ground; boughs and leaves are not often available in sufficient quantity and there should be no temptation for the trooper to rob his horse of hay or straw. Provision should therefore be made for a special supply as bedding for the men. Attention to this rule, to cleanliness, and to the proper cooking of food will greatly lessen the number and frequency of camp diseases.

785. To prevent stampeding in camp it will in most cases be sufficient for the men to go quietly among the horses at the first sign of fright and speak to them. If horses are stampeded, men should mount the fastest animals within reach, place themselves in front of the herd, and conduct it back to camp. With old horses the sounding of *stable call* may prevent or stop a stampede.

786. One of the greatest difficulties of Cavalry in campaign is to secure sufficient long forage. On this account the greatest attention should be given to grazing at every opportunity.

The horses are either held on the halter rope, picketed on the lariat, turned loose in inclosed pastures, or if there has been opportunity for sufficient training they may be herded.

Special effort should be made to give them an hour or two of grazing in the morning while the dew is on the grass (not clover), especially if the supply of hay at night has been short, and in such cases they should not be disturbed until the last moment, time lost being made up by more rapid marching.

Should the horses have to be protected from an enemy, they are taken out to graze under charge of an officer as soon as possible after camping. They are taken as far as is safe, so as to keep the nearer grass for night. It is occasionally practicable to arrange the camp so as to use the wagons and natural obstacles to inclose a space for night grazing.

787. The camp site should be on well-drained, dry ground, and due consideration should be given to shelter from cold winds or, in summer, to shelter from the sun, for horses as well as men, and to exposure to cooling breezes. Convenience of watering places, grass, fuel, and shelter must be considered on the principle that,

although in campaign, comfort must often be sacrificed to more imperative considerations, yet the vigor and staying powers of both horses and men are dependent upon the most solicitous care for their comfort and conservation of their energy.

This duty of conservation calls for all the forethought and energy of cavalry officers in camp as well as on the march, and the degree of success obtained is one of the highest indications of the ability of the officers and of the training of the command.

788. Fixed camps or cantonments where regular tentage is furnished, or where substantial shelters are constructed, are carefully laid out on the plan above indicated or on a plan specially adapted to the ground and conditions, arrangements being made for economy of labor in watering, feeding, supply, and in the daily service, and especial attention being given to sanitation.

789. The position of the transportation (wagons and pack trains) will be selected by the commander or his representative with due regard to facility of supply and convenience in watering, etc., as well as to comfort and safety.

MARCHES.

(See also F. S. R.)

790. The most difficult problem that confronts a cavalry officer is to bring his command on the field of actual combat with their principal weapon, the horse, in serviceable condition, not only for the charge, but for the rapid movements required by the varied rôle of cavalry on the battle field under modern conditions.

Experience shows that when cavalry has been unable to respond to the demands of the action or to take advantage of opportunities presented, their failure has been due to the exhaustion or to the injuries of the horses rather than to the fatigue of the men.

Accordingly attention is concentrated on minimizing the wear and tear of horseflesh; incidentally, but none the less surely, the rider's condition is benefited by the good condition of his mount.

791. It is inevitable that the proportion of cavalry recruits drawn from classes of horsemen who are accustomed to thinking of the needs of the horse will be almost negligible. Consequently this instinct of the natural horsemen must be replaced by an equivalent habit resulting from special and persistent training.

Supervision in actual service can at best correct only a few neglects or errors; the individual troopers must have been first trained into *horse savers*. The supervision of the officers and non-commissioned officers will then suffice to keep them up to their work under stress of hardship, fatigue, and excitement.

792. Although in discussing marches it is usually assumed that the animals are in condition, yet it must be admitted that marches are often undertaken with horses that for various reasons are not in proper condition. Distances covered and time under saddle must then be very short until "condition" has been obtained. If forced by imperative military necessity to disregard this precaution, we must frankly face a loss of 50 per cent almost immediately, due to sore backs and exhaustion.

The number of hours during which the horse is to carry his rider is to be considered, as well as the number of miles he is to cover, and the former consideration may easily be the important one where slow movement is imposed upon a cavalry force or where,

on account of difficulty of securing forage, time must be gained for grazing.

793. Preparation.—Before starting, special inspections should anticipate everything that can be foreseen in the adjustment of saddlery and equipment and in the shoeing.

In winter, the ice calks must be looked to and it must be certain that the men know how to quickly apply and remove them.

If there are extra horses they should carry a few spare saddle blankets to replace those which will be destroyed by cutting to relieve saddle galls.

794. Guides cautiously used may be very useful, but a habit of dependence upon them is to be discouraged. An inhabitant, mounted on a spare horse and taken along for a few miles, or, until he can be replaced by another man, is more likely to be of use than one with a more extended but less intimate acquaintance with the country.

795. The start.—Unless for imperative military reasons the start should not be made for an hour after daylight, and usually the mobility of cavalry will allow it to move out in the morning still more deliberately without danger of prolonging its march too late in the day.

796. Night marches are slow and fatiguing, the inability to see the progress being made has a depressing mental influence, there is always danger of lengthening the road by going astray, and neither men nor animals can make up the lost sleep in daylight. Consequently there must be imperative reasons when a night march is undertaken.

797. Formation.—The narrowness of the roads usually prescribes the column of squads, and often the column of half-squads. Every effort must, therefore, be made to reduce the length of the column by closing up as much as is compatible with comfort and economy of effort and, with a large command, by utilizing parallel roads.

In order to avoid checks and irregularities of gait and to allow the dust to settle or blow away, distances must be left between platoons; these distances like those between larger units disappear when checks occur and are at times exceeded, but there is a constant tendency to recover them.

Each element marches so as to best take advantage of the ground, so that in general each will take up the trot or walk at the point where the preceding unit changed gait.

798. In campaign the roads will often be reserved for the infantry, artillery and the combat trains, and the cavalry will find its way across country. It can then often march in the maneuvering column with platoon front, a formation which permits each horse to see clearly the ground before him and gives relief from dust. The regiment may also use the double column.

By sending a party ahead to cut and roll up barbed wire, open the fences, and prepare crossings, the column can advance steadily. When a short defile appears in front, the leading unit, if the ground permits, increases the gait until it has passed well beyond it, so as to avoid checking the column.

The footing must be constantly kept in mind and its consideration will govern rather than the accurate preservation of regular formations. Good soft footing will often be found at the sides of the roads and the column can be spread out, traveling along both sides. In going across country in platoon front the troopers take intervals to find good footing, and after a few platoons have passed, the horses of the succeeding platoons will be following smooth and well-defined trails.

799. *Leading on foot.*—The modern trooper being equipped and trained for quick action dismounted is a good, active walker and full advantage of this must be taken, when at the walk, to save the horses as well as to limber up the men and give them relief from the constraint of the saddle.

As frequent dismounting and mounting with packed saddles not only involves some effort but, with girths as loose as they should be on the march, tends to shift the saddles, advantage should be taken of anticipated halts to dismount and walk for some distance before halting and again after the halt before remounting.

Habitually on campaign the troopers should assist each other in mounting by bearing down on the off stirrup or off side of the saddle to keep it level.

Leading dismounted requires some training to teach the horse not to crowd his rider nor to step on his feet; it should not be carried to the point of fatiguing the trooper but so arranged that after he is trained to it he will always be glad of the relief of dismounting or of remounting.

Steep hills indicate leading dismounted, especially in descending, as here little effort is imposed on the man and great relief afforded the horse. In climbing them the pace must be very slow for the comfort of the men. A horse climbs with much less effort

than a man; he can comfortably carry his rider up a steep hill if the pace is very slow.

800. *The pace* should be arranged with due consideration both of the time the horse is to carry his load and the distance to be covered. The quicker a march can be completed without forcing the less the fatigue to both horse and man. Where the footing is good, the road level, and other considerations do not hamper, the column can advance from a halt, first by leading dismounted, then mount and walk, then trot, a short gallop, then the trot, the walk, and finally dismount and lead to the next halt. No pace is to be maintained continuously long enough to weary either horse or man. The officer setting the pace should occasionally drop back to observe the pace of the column.

The trot should be at 8 miles per hour so as to facilitate posting, the gallop should be at less than the maneuvering gait and will depend upon the training, as, unless accustomed to this gait in marching, the horse will waste his energy.

Very rarely, however, will the conditions allow the regular arrangement of gaits indicated above. Rolling country, with ascents and descents, stretches of hard or stony road, or of mud or sand, crossings of streams, etc., will ordinarily impose corresponding changes of gait, on each small unit of the column as it reaches them. Consequently the column must be articulated with distances between the platoons to allow for closing up at checks.

Each platoon conforms to the gait of the platoon ahead as it reaches the point where changes have been made. With care this method of marching should result in enabling every horse in the column to move with almost the same regularity and freedom from checks as though he were at the head of the column.

The fast pace that can be expected of small detachments and of single riders can not be demanded of a cavalry column, and as the command increases in size the rate of march will decrease. The regulation gaits being, at the walk, 4 miles, the trot, 8 miles per hour, cavalry should be able to make, including halts, from 5 to 6 miles per hour. This rate can be maintained for daily marches of 25 miles under ordinary conditions for a week at a time, after which a day of rest should be allowed before continuing the march.

801. *Forced marches.*—In emergencies cavalry may, under favorable conditions, cover as much as 50 miles per day for several days and 75 miles inside of 24 hours without serious injury to the horses. Such emergencies justify the lightening of the load carried on the saddle if it can possibly be transported otherwise.

The work to be demanded of the cavalry at the end of the forced march must be kept in view; this is presumably a mounted rôle and the horses must be brought on the field in a condition to do their part. If it is not the intention to call for mounted action at the end of the forced march this must be clearly stated, and the cavalry commander will then be justified in sacrificing some of his horses.

So many conditions operate to affect the length of forced marches and long-distance rides that they are here touched upon only in order to furnish some guide in planning operations. Expert cavalry opinion should be available in determining what may be safely demanded at the moment in each particular case.

802. The mobility of a cavalry column is greatly reduced when it has to rely on wagons for its transportation. Good pack trains can keep pace with it and follow it anywhere. On account, however, of their small carrying capacity, pack trains can not replace wagon trains, but should be well organized and held in reserve for emergencies.

803. Halts.—The first halt should be made after a couple of miles have been covered and within three-quarters of an hour after starting; it should, if possible, be preceded by a short trot in order to betray to the troopers any faulty adjustment of equipment. This halt gives an opportunity for the horses to stale, and for the troopers to tighten girths and to adjust saddlery, equipment, and dress.

Other halts of 5 to 10 minutes should be made at hourly intervals, and, if the march is to be prolonged into the afternoon, a longer halt should be made at noon when girths are loosened, horses fed, and the men eat their lunch.

On an unusually long march this long halt may be extended sufficiently to admit of unsaddling, but this must not be done without the precaution of previous loosening of girths and cooling of backs, supplemented by hand rubbing. Some saddles may even then have to be immediately replaced to keep down swelling and prevent injury.

The length of the halt should be announced immediately on halting in order that the men may govern themselves accordingly.

If the column has closed up at the halt, the different elements arriving at different times, they will move out successively with the old distances, so that each may have its full period of rest. The elements may be halted simultaneously by signals passed back and

similarly be again put in march, thus preserving their distances constantly.

804. *Watering.*—On the march, as a rule, horses should be watered whenever opportunity occurs, conforming as far as practicable to the rule of water before food, and removing the bit when the horse can be better satisfied by so doing, or when the quantity available is small. Public watering troughs are avoided on account of danger from infection. The use of buckets will often make watering places otherwise insufficient thoroughly satisfactory.

805. *Feeding.*—In time of peace when a regular supply of grain and long forage can be counted on effort should be made to follow as far as practicable the routine to which horses have been accustomed in garrison. In time of war regularity of supply of forage, and especially of the long forage, can not be expected, and officers must neglect no opportunity of catering to the needs of their animals when passing grainfields, pastures, or stacks of hay and other fodder. A supply for the night can often be gathered and carried along on the wagons or may be tied up compactly with the lariat and be carried on the horse. The principle of feeding a little grain or forage at every opportunity should govern, so that the horse shall have something in his stomach at all times. The risk of having to work on a full stomach must often be frankly accepted as less than that of having to later go without food.

The finished trooper with his habitual solicitude for his mount will be constantly removing the bits to let his horse fill himself at every delay or check and he will miss no chance to pick up an extra feed of grain.

SWIMMING HORSES AND FORDING.

(See also F. S. R.)

806. As it is often necessary for cavalry to cross streams by swimming, the exercise is important, as it gives confidence to men and horses.

It is laid down in the school of the trooper, dismounted, that the men must be taught to swim. Unless this has been done, it is useless to expect a command to make crossings where the horses must swim, unless the men who are not swimmers can be crossed on boats, rafts, or bridges.

For instruction the horses are at first equipped with the snaffle only and are barebacked. The reins are on the horse's neck just in front of the withers and knotted so that they will not hang low enough to entangle the horse's feet, care being taken to have them so placed as to permit the horse to push his nose well out and to have entire freedom of the head. A lock of the mane is tied in with reins to prevent their slipping over the head. The horse should previously be watered, but not too freely.

The trooper mounts, rides into the stream, and when he gets into deep water, drops reins, seizes a lock of the mane with the upstream hand, allows his body to drift off quietly to the downstream side of the horse, and floats or swims flat on the water, guiding the horse, when necessary, by splashing water against his head, only using the reins when the splashing fails. When the horse touches bottom at the landing, the trooper pulls himself on the horse's back and takes the reins. The horse is a good swimmer and is easily controlled when not confused; it is therefore necessary that the trooper should be gentle and deliberate. The trooper must be cautioned that pulling on the reins is apt to pull the horse over backward, and that when the horse touches bottom he may begin to plunge.

The trooper will also be required to swim holding the horse's tail, the horse towing him.

After the trooper and horse have gained confidence, the trooper will retain his seat while swimming. The weight of the rider presses the horse down and impedes his movements; the trooper

should therefore hold the knees well up to lessen the resistance, and steady his seat by holding on the mane.

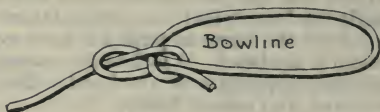
With some horses that swim low it is advisable that the trooper sit back on the loins to allow the forequarters to float high.

807. Saddlery, arms and equipment, and the men's clothing will be crossed in boats or on rafts when time and facilities permit. When the crossing must be made fully equipped the stirrups are crossed and secured to keep them from catching on the horse's feet or in the equipment of other horses. It is well to remove the curb bits.

Immediately after crossing arms are looked after to dry them as much as possible.

808. The men are instructed in crossing swift-running water to keep their eyes fixed on the opposite bank, and to keep the horse headed slightly upstream.

When large, swift rivers are to be swum, too hazardous for all the horses to be ridden, the bridle reins are secured to avoid the danger



of their being caught by the horse's feet or by those of another horse swimming close to him; the stirrups are crossed and secured; a trained horse is selected for a leader and is ridden without saddle; all the horses are led or driven to the approach and can generally be made to take the water without much difficulty. The approach should be selected at some distance above the landing. If practicable, a few horses should be taken over and placed at the landing, and some men stationed to receive the horses as they land. Stable call sounded on the opposite bank as the horses take the water may be a useful expedient.

If there be a ponton bridge in the immediate vicinity, the crossing should be below it.

809. When a horse is towed or led from a boat he should be held astern of the oars, and on the downstream side or in the wake. He is towed by a rope knotted around the neck in a bowline, a knot that can not slip and strangle him and is easily adjusted and untied.

The rope should be just tight enough to prevent slipping over the head. When the horse is afloat the rope must be slack or his head will be pulled under water and he will drown.

810. When a stream with a treacherous bottom is to be forded, stakes or bushes should be placed so as to mark the limits of the ford, or may be placed so as to mark the dangerous places only.

When the stream is to be forded at night, lighted lanterns should be fastened to the stakes and one displayed at the landing or a fire built there.

In order to minimize delay and secure more liberty of movement, and because a ford may become too deep after many animals have used it, every effort should be made to discover other crossing places. The inhabitants may not have discovered them through never having need of other crossings.

A ford should be carefully examined before a crossing is begun and the width of the front in crossing is limited by the safe width of the ford.

When the stream has a swift current and the water is above the horses' bellies, the subdivisions should cross with as wide a front as practicable, to permit a freer flow or prevent damming of the water, which might carry a horse off his feet; but in crossing a dangerous ford, the column of half-squads is less objectionable than the column of squads.

Cavalry should generally cross streams above infantry or so far below that the water will not be dammed against them.

Ice from $4\frac{1}{2}$ to $6\frac{1}{2}$ inches thick will bear cavalry marching in column of files or half-squads.

Whenever opportunity offers, horses should be practiced in crossing ponton bridges; leading first in column of files at a slow walk and then in column of half-squads, the horses on the inside, the troopers on the outside.

Troops take the formation for crossing at least 100 yards before reaching the bridge, and retain this formation until at least 100 yards beyond it.

During a crossing, as a rule, only the engineers on duty at the bridge are permitted to cross in the opposite direction. Good order and calmness must prevail and checks on the bridge and on the opposite bank, with hurried closing up of rear units, must be avoided under all circumstances.

In crossing ponton bridges the orders of the engineer officer in charge must be obeyed.

TRANSPORTATION OF HORSES.

BY RAIL.

811. Care should be taken that before a long railway journey horses are in good condition and they should have a bran mash before starting, as on the journey they will get hay only when they are unloaded, en route, or when special stops are made to allow them to be fed in the cars and the latter cleaned of what remains to avoid danger of fire.

It is safest to remove the shoes if the animals are not to be put to work immediately on detraining.

The tails may be protected from rubbing by tying them up and covering them with gunny sacking, secured from slipping by a few stitches through the hair with a bale needle; care must be taken that men do not attempt to accomplish this by tying strips around the root of the tail, as the constriction may cause the hair to fall out or on a long journey even more serious injury.

812. Unless horses are to be loaded at regular stockyards or where special facilities are known to exist, the loading place must be previously examined and perhaps extra ramps provided to avoid delay. It is always well to carry a portable ramp for unloading in emergencies; and if there is expectation of detraining in the open, there should be a ramp for every three or four cars.

Cars are inspected to see that they are in proper condition, and, if they are equipped for feeding and watering en route, that the apparatus is in proper working order.

813. On reaching the loading point the saddlery is removed and carefully tied up in the saddle blanket or in a grain sack. The horses are then led into the cars, beginning with a quiet animal, and are placed across the car alternating heads and tails, the halter being removed after the horse is in place as soon as it is not needed to keep him from getting out. The halter head may be left on, removing only the halter strap or rope.

The more snugly animals are packed in ordinary stock cars the better they will travel. These cars will usually carry 18 animals conveniently.

814. The trains should be so made up that the man and his horse are always on the same train. A squadron should have its men, horses, baggage, and transportation complete on one train, so that it may move off into camp immediately on detraining.

Special watchfulness is necessary to insure the above precautions, as railway employees are prone to disregard the requirements of the troops, and once the train is made up traffic schedules serve as an excuse for refusal to correct errors.

815. On arrival at the detraining point, the officers first look over the ground, the men are then detrained, carrying out the equipment they have with them; they next get their saddles from the baggage car and then detrain the horses, saddle up and march to camp, returning later for the baggage and transportation or leaving a detail to bring it up.

The special conditions—weather, distance of camp, and service to be performed—govern the work and manner of detraining, but before beginning the operation some plan is formulated and is not lightly modified.

BY SEA.

816. The horse should have a bran mash the evening before embarkation and should have neither food nor water for two hours before he is loaded. On board ship he is for the first few days fed hay only and thereafter about half a ration of grain, care being taken to keep the bowels open by bran mashes several times a week.

Unless the voyage is a short one and unless the debarkation is to be made in the presence of the enemy shoes should be removed. If, however, the arrangements are imperfect and the horse must stand on a wet footing the hoof may become so worn as not to hold a shoe on landing; it will be necessary in such cases to leave the shoes on.

Horses should not be loaded until arrangements have been made for the ship to get under way as soon as the last animal is on board. This is of special importance in hot climates on account of the poor ventilation when the vessel is stationary. On arriving at the point of debarkation the same reason requires the vessel to be kept moving until the unloading of the horses can begin.

817. When fighting units are embarked for a landing in the presence of the enemy free space must be left to allow for leading for exercise, in order that on landing the animals may be in condition for immediate service. Passageways wide enough to get the horses out of their stalls and to lead them about in turn for 20 minutes daily is all that is necessary.

The details of embarkation, debarkation, and horse management at sea are found in the Transport Service Regulations.

MINOR WARFARE.

818. Minor warfare, or war on a small scale, embraces enterprises of relatively small bodies of trained and organized troops against hostile forces similarly constituted; its more frequent application, however, is in operations against savage or semi-civilized enemies, or such as resort to guerilla warfare after defeat of their organized troops.

In the former case the tactics will conform to those prescribed for the smaller units, with slight modifications indicated by special circumstances; in the latter, the methods pursued must be governed by the nature of the country and the character, armament, distribution, and system of warfare of the enemy. This will probably involve *irregular operations* by detachments, each with more or less latitude under a general plan of campaign. Adaptability of officers and men to new conditions is an important factor of success.

819. The enemy will usually be found in small bodies lacking in organization and discipline, assembling and scattering with great facility, and living on the country. For success his groups generally depend on the rapidity and secrecy of their movements, on the concentration of greatly superior forces at the point of attack, on their intimate knowledge of the country, on the difficulties of the terrain, on the assistance of the population, and on surprises, ambuscades, cunning, and treachery.

820. When the enemy has a seat of government, or a place to which he attaches special importance, capture thereof may terminate resistance; in other cases seizure of herds and supplies will be necessary to obtain submission. In operations against roving bands, assisted by the population through sympathy or fear, the troops will be divided into small units cooperating in the execution of a general plan.

821. Resolution, vigilance, and good judgment are important factors in overcoming the hardships and disadvantages of warfare against savages and guerillas. Fear and hunger are the principal influences to which such enemies are susceptible. The prestige of the troops should be cultivated in every way practicable. Hesitation, delays, and retrograde movements are looked upon as

signs of weakness and serve to embolden the enemy and to recruit his ranks. A vigorous offensive, strategical as well as tactical, manifested in continuity of operations, bold and resolute attacks, and relentless pursuit, is the safest method of conducting operations.

822. Preparation for a campaign should include careful study of the topography, climate, and sanitary conditions of the country and of the mode of fighting, habits, and characteristics of the enemy; a summary of the information available should be distributed to the troops. The best maps obtainable, durably mounted, should be furnished to all units. It will generally be necessary to hire or impress guides, and in foreign countries, interpreters also.

The troops selected for service should be seasoned and well disciplined. Their armament and equipment must be complete and their clothing suited to climatic conditions. The troops should be highly mobile; in most cases a large proportion of mounted troops will be required.

The resources of the country should be utilized as far as possible, but, as a rule, nearly all the supplies will have to be carried. The problem of transportation is a difficult one and requires careful consideration. Owing to lack of good roads it will often be impossible to use wagons or even carts. Expeditionary forces will then be dependent on pack animals for transportation. In the policing of occupied territory pack animals also are necessary to carry rations for detachments and to renew the supplies of small stations.

823. In the occupation of country infested by guerillas or bands of robbers it will often be advisable to establish a number of secondary bases at strong points, fortified if necessary, to be held by foot troops, while mounted units continue operations in the field. In addition to rations, forage, and ammunition, such stations should carry small reserves of clothing, equipment, horse-shoes, and veterinary supplies, so that mounted detachments, periodically relieved, can turn to them for treatment, reshoeing, and recuperation of their animals.

824. In close country the march will often have to be made in column of files, and the use of flankers will be difficult or impossible. As the enemy is usually skillful in ambushes, reconnaissance must be carried out with special care, patrols being pushed out as far as danger of being cut off will permit. A column in any case must be preceded by an advance party. For further security the command may be divided into several nearly equal

parts separated by distances of about 100 yards. When there is special danger of surprise the troopers may be required to march with their arms in readiness for instant action.

In the enemy's country pack trains will march between the tail of the column and a strong rear guard.

825. *Camp* should be made in a compact formation, on open ground suited for defense. The means of transportation should be inside the camp. All the avenues of approach must be guarded.

Barbed wire may be stretched at places open to a rush. Every unit of the command must have a position assigned to it, to be taken in case of alarm. The line of defense will be on the circumference of the camp. A reserve is kept at the disposal of the commander for use in emergencies. *Vigilance must never be relaxed.*

826. Combats resulting from unexpected meeting with the enemy will be relatively frequent. In such cases promptness to attack confers a great moral advantage. In dismounted attacks an enveloping movement will be specially effective; the enemy seldom has sufficient maneuvering ability to meet them. When possible mounted units should take up a vigorous pursuit.

Mounted troops are not in great danger from a rush by dismounted savages. Mounted detachments cut off on a trail have a better chance of escape by charging at once than by attempting a defense with the rifle.

827. Operations at night, and during storms or severe weather, are frequently advisable. The discipline of irregular troops being inferior, they rarely provide proper protection for their camps under conditions imposing hardships; by taking advantage of this fact it may be possible to surprise them and inflict serious loss.

Night operations of mounted troops may be utilized to reach positions from which to attack at early dawn.

NIGHT OPERATIONS.

(See also F. S. R.)

828. At night the usefulness of the cavalry horse is greatly impaired, darkness preventing the utilization of his speed.

In mixed commands cavalry should, therefore, not be employed for night operations, except at a distance.

Cavalry under special circumstances may have to resort to night assaults on foot to minimize fire losses, but generally its night operations will consist of night marches conducted with stealth, with the object of escaping observation of aerial scouts and of gaining, unobserved, positions from which to operate by surprise in daylight.

To carry out these night marches it will often be necessary to capture or brush aside small forces of the enemy. In such encounters firing should be avoided and these patrol actions should not excite the suspicion of the enemy as to the movement of a larger force.

If, however, the main body should come into serious collision with a large force and should have to sacrifice secrecy of movement, a judicious employment of rapid fire may deceive the enemy as to our strength and permit the execution of the original plan.

In harassing a retreating or severely handled enemy cavalry will also frequently resort, at night, to bursts of fire from points which it has gained on the flanks or in rear, thus breaking the rest of the fatigued enemy and destroying his morale.

829. As the essence of night operations is secrecy, preparation for the enterprise must be confided to a few of the higher officers only until the troops are turned out for the movement. At that time, however, all officers should be informed of the general design and the composition of the whole force, and should be given such additional information as will secure cooperation and eliminate mistakes.

During the movement every precaution must be taken to keep secret the fact that troops are abroad.

Precautions are taken to avoid losing the road; at forks and cross-roads obstructions are placed across the road not followed, or men may be left to direct following units.

Unfriendly guides must frequently be impressed. These should be secured against escape, outcry, or deception.

Fire action should be avoided in offensive operations. In general, rifles should not be loaded, in order to prevent premature firing.

A conspicuous badge should be adopted as a means of recognition.

830. Long night marches should be made only over well-defined routes. March discipline must be rigidly enforced. Lights, smoking, and talking may be prohibited. The troops should be marched in as compact a formation as practicable, with the usual covering detachments, advance and rear guards, but with very greatly reduced distances, and with numerous connecting files. The rate of march is much slower than in daylight.

To avoid noise, wagons should not accompany the column and for the same reason it may be advisable not to take artillery.

The plan for a night enterprise or a night march must be extremely simple. Coöperation of two or more forces can not be relied on.

FIELD ESCORTS.

(See also F. S. R.)

831. The commander of the escort, if a commissioned officer, regulates the time and distance of the marches and the location of the camps.

The escort of trains, being a service of slow and often interrupted marches, is very injurious to cavalry horses, and is better performed, as a rule, by dismounted men.

The commander of the escort commands the convoy and is responsible for its safety; he directs the march, keeping as many wagons abreast as practicable; enforces train discipline, placing for this purpose a small part of the escort with the convoy, and, with the main body, protects the convoy and expedites the march.

The main body furnishes advance guard, rear guard, and flankers; reconnoitering patrols are detached to considerable distances. In case of attack, the escort should, if possible, hold the enemy at a distance, keeping up the march of the convoy; when this is not practicable, the train should be parked and the defense concentrated; if the defense can not be made successful, such part of the convoy as can not escape by flight must be destroyed; the animals must be taken away or shot.

INTRENCHMENTS.

(See also F. S. R.)

832. Intrenchments play an important part in dismounted combat, and it will often be necessary for cavalry to intrench. Such defenses will frequently enable the cavalry commander to hold for the advancing infantry desirable positions from which he would otherwise be compelled to withdraw. Officers will thoroughly familiarize themselves with this subject, and all squadrons be given practical instruction therein.

PART III.—CEREMONIES.

REVIEWS, PARADES, ESCORTS, PRESENTATION TO THE STANDARD, GUARD MOUNTING, HONORS.

GENERAL RULES FOR CEREMONIES.

833. On occasions of ceremony, except funerals and reviews of large forces, troops will be arranged from right to left in line, and from head to rear in column, in the following order: First, Infantry; second, Field Artillery; third, Cavalry. Artillery, Engineer, and Signal Corps troops, equipped as Infantry, are posted as Infantry; dismounted Cavalry and marines attached to the Army are on the left of the Infantry in the order named; companies or detachments of the Hospital Corps and mounted detachments of Engineers are assigned to places according to the nature of the ceremony; mounted companies and detachments of the Signal Corps are posted as Cavalry. When Cavalry and Field Artillery are reviewed together without other troops, the artillery is posted on the left. Troops in column in funeral escorts will be arranged from head to rear in the following order: First, Cavalry; second, Field Artillery; third, Infantry. In the same arm, regulars, militia in the service of the United States, and volunteers are posted in line from right to left, or in column from head to rear, in the order named. In reviews of large bodies of troops the different arms and classes are posted at the discretion of the commanding general, due regard being paid to their position in camp. On all other occasions troops of all classes are posted at the discretion of the general or senior commander.

At the *assembly* for a ceremony squadrons are paraded on their own ground.

At the trumpet call for assembly of the regiment the regiment is formed.

The rules laid down for reviews furnish a guide for other ceremonial occasions for which troops may be paraded.

NOTE.—Inspections are not ceremonies. They are usually made by the commander for a general survey of his unit. He uses the methods of the drill regulations in the most practical manner for the purposes of his inspection.

The detailed inspection should be made in the smaller units. As far as possible the unit should be kept constantly in good condition by daily special inspection of some detail of the armament, equipment, clothing, horses, buildings, etc. The tendency to let things go until a day of periodical inspection should be systematically combated.

REVIEWS.

834. Reviews are held for the purpose of making a general inspection of the personnel, the mount, armament, clothing, equipment, and training of a command; and also as a special honor to a high military authority or civil dignitary.

The officer for whom the review is ordered fixes the place, the hour, and indicates the dress, the equipment, and the formation desired; he also determines whether the review is to be followed by evolutions or exercises.

The post of the reviewing officer, usually opposite the center of the line, is indicated by a flag.

Officers of the same or higher grade, and distinguished personages invited to accompany the reviewing officer, place themselves on his left; their staffs and orderlies place themselves, respectively, on the left of the staff and orderlies of the reviewing officer; all others who accompany the reviewing officer place themselves on the left of his staff, their orderlies in rear. A staff officer is designated to escort distinguished personages and to indicate to them their proper positions.

An organization will not be reviewed before an inspector junior in rank to the commanding officer; but he will be given every facility for the purposes of his inspection.

In forming for review the troops may be placed in any regulation formation except that in line the units are not echeloned, and that in line or in mass the machine guns are on the left of the regiment with 6 yards interval. The squadron is usually in line, it may be in column; the regiment is in line or in mass; the brigade in line, or in line of masses.

In the march past, the squadron passes in column; the regiment in column, in column of squadrons, in double column or in mass; the brigade in column, in column of squadrons, in double column, or in column of masses.

835. If the ground is restricted formations and movements must be adapted to the space, and intervals and distances reduced. The column of squadrons may be formed from column (1. **Squadrons**, 2. **Line**, 3. **MARCH**) and to save space this movement may be executed successively by the squadrons as each reaches the line on which it is to march past.

836. In a review of commands comprising the three arms, each arm conforms to its own regulations as far as practicable. Special

arrangements are made. The breadth of front for the march past is made as nearly as practicable the same for the different arms.

837. In a squadron review the trumpeters of the squadron are formed in line in single rank; in line they are 6 yards from the right flank, on a line with the front rank; in column they are 6 yards in front of the leader of the first platoon and 6 yards in rear of the captain.

The trumpeters of each regiment, led by the chief trumpeter, are united in platoon formation in double rank. In line and in mass they are placed 6 yards to the right of the regiment, in column they are 6 yards in advance of the captain of the directing squadron and 6 yards in rear of the noncommissioned staff.

838. A command upon reaching the ground is drawn up in the formation and upon the line previously determined. If it must await the arrival of other units to take its place, it is halted, dismounted, and allowed to rest far enough from the ground to be occupied to be out of the way of the neighboring troops.

839. On the arrival of the reviewing officer the commander brings the troops to attention, has sabers drawn and presented, and salutes.

When the rank of the reviewing officer entitles him to the honor, each regimental standard salutes at the command: 1. **Present**, 2. **SABER**; the assembled trumpeters sounding the march or flourishes. The commander then has the sabers brought to a carry, forms column, and marches on a line passing in front of the reviewing point so that the right flank will pass at 12 yards.

Distance between regiments in brigade is 50 yards, between brigades 100 yards.

The troops pass in review at any gait. They may pass several times, at different gaits; in this case the salutes are rendered the first time only.

840. In the first march past (at any gait) all officers and all commanders of platoons, the noncommissioned staff and the guidons salute. The regimental standards salute if the rank of the reviewing officer entitles him to the honor. The salute is made at 12 yards before reaching the reviewing officer and the return to carry saber immediately after passing him.

Excepting those who salute, all keep their heads and eyes to the front.

The reviewing officer and others at the reviewing stand salute the standard as it passes.

The reviewing officer returns the salute of the commanding officer of the troops only. Those who accompany him do not salute.

After saluting the reviewing officer, the commanding officer of the troops turns out of the column and takes his post on the right of the reviewing officer, his staff on the right of the reviewing officer's staff. Sabers are not returned. When the rear element of his command has passed, he salutes the reviewing officer and then rejoins his command. The commanding officer of the troops and his staff are the only ones who turn out of column.

841. If the post of the reviewing officer is on the left of the column, the commanding officer and his staff turn out of the column to the left, taking post as prescribed above, but to the left of the reviewing officer.

842. In marching past, the trumpeters on arriving at 50 yards from the reviewing officer sound a march appropriate to the gait, continuing until they have passed 100 yards beyond the reviewing point and keeping their place in the formation.

843. The march past will be so regulated that the different arms when passing the reviewing officer will be separated by the distance of 100 yards.

In a brigade or larger review a regimental commander may cause his regiment to stand *at ease*, or he may cause it to dismount and rest, taking care not to interfere with the ceremony.

In reviews of brigades or larger commands, each regiment is careful not to decrease the pace after passing the reviewing officer and to so direct its march as *not to interfere with the march of the column in rear*; unless otherwise ordered, it then clears the head of the column and returns to camp by the most practicable route.

PARADES.

844. The command is formally paraded for the purpose of publishing complimentary orders or presentation of medals, or of emphasizing the importance of smartness in turnout of men and horses and of smoothness and life in evolution.

The command having assembled is marched to the most suitable ground, where it is reviewed. The formations are selected with an eye to effect, and the review may be followed by a few showy evolutions.

ESCORTS.

ESCORTS OF HONOR.

845. Escorts of honor are detailed for the purpose of receiving and escorting personages of high rank, civil or military. The troops for this purpose are selected for their soldierly appearance and superior discipline.

The escort forms in line opposite the place where the personage presents himself, the trumpeters on the flank of the escort toward which it will march. On the appearance of the personage he is received with the honors due to his rank. The escort is formed into column of platoons or squads and takes up the march, the personage and his staff or retinue taking positions in rear of the column. When he leaves the escort line is formed, and the same honors are paid as before.

An officer is appointed to attend the personage and bear such communication as he may have to make to the commander of the escort.

846. When the position of the escort is at a considerable distance from the point where the personage is to be received, as, for instance, where a courtyard or wharf intervenes, a double line of troopers, with intervals, facing inward, may be posted from that point to the escort; the troopers successively salute as he passes and are then relieved and join the escort.

FUNERAL ESCORT.

847. The funeral escort of the Secretary of War or General of the Army will consist of a regiment of Infantry, a squadron of Cavalry, and a battalion of Field Artillery; of the Assistant Secretary of War or the lieutenant general, a regiment of Infantry, a squadron of Cavalry, and a battery of Field Artillery; of a major general, a regiment of Infantry, two platoons of Cavalry, and a battery of Field Artillery; of a brigadier general, a regiment of Infantry, a platoon of Cavalry, and a platoon of Field Artillery; of a colonel, a regiment; a lieutenant colonel or major, a battalion or three squadrons; a captain, one company (squadron or battery); a subaltern, a platoon.

The escort is formed opposite the quarters of the deceased; the trumpeters on that flank of the escort toward which it is to march.

Upon the appearance of the coffin the commander commands:

1. **Present**, 2. **SABER**, and the trumpeters sound a dirge.

848. The coffin having been placed on the caisson or hearse the escort is next formed into column of platoons or squads. The procession is formed in the following order: 1. Trumpeters, 2. Escort, 3. Clergy, 4. Coffin and pallbearers, 5. Mourners, 6. Members of the former command of the deceased, 7. Other officers and men, 8. Distinguished persons, 9. Delegations, 10. Societies, 11. Civilians. Officers and men (Nos. 6 and 7), with side arms, are in the order of rank, seniors in front.

The escort marches slowly, the trumpeters playing a dirge. The column having arrived opposite the grave, line is formed facing it.

849. The coffin is then carried along the front of the escort to the grave; sabers are presented, the trumpeters sound a dirge, and the coffin having been placed over the grave, sabers are brought to the carry.

During the funeral service officers and men bow the head.

850. When the funeral services are completed and the coffin lowered into the grave the commander causes the escort to return *saber* and dismounts it (**To fire on foot**) (substituting the words "**To fire**" for **To fight**). He assembles the command and fires three rounds of blank cartridges over the grave, the muzzles of the rifles being elevated. When the escort is greater than a squadron, one squadron is designated to dismount and fire the volleys.

A trumpeter then sounds **taps**.

851. The escort is then formed into column, marched to the point where it was assembled, and dismissed.

The trumpeters do not play until they have left the inclosure.

When the distance to the place of interment is considerable, the escort, after having left the camp or garrison, may march *at ease* until it approaches the burial ground, when it is brought to attention.

852. At the funeral of a mounted officer or man, his horse, in mourning caparison, follows the hearse.

853. Should the entrance to the cemetery prevent the caisson's accompanying the escort to the grave, the column is halted at the entrance long enough to take the coffin from the caisson, when it is again put in march. The Cavalry and Artillery, when unable to enter the inclosure, turn out, face the column, and salute the

remains as they pass. If necessary, the Cavalry may be dismounted *to fire on foot*, assembled, and marched into the cemetery.

854. When the remains are escorted from the quarters of the deceased to the church before the funeral service, arms are presented upon receiving them and as they are borne into the church.

The commander of the escort, previous to the funeral, gives the clergyman and pallbearers all needful directions.

855. Funeral ceremonies, dismounted, are conducted according to the same principles. After the coffin has been placed over the grave the command is brought to **parade rest**, and heads are bowed during the service.

PRESENTATION TO THE STANDARD.

856. At least twice a year the regiment will be formally presented to its standards. At this ceremony special effort is made to have all new men present.

The regiment being in mass, the colonel sends a squadron, accompanied by the assembled trumpeters, to receive the standards and escort them to the regiment.

The escort moves out in column, the standard bearers at the center of the column, and marches without music to the colonel's office or quarters, where it forms line and halts, facing the entrance, and draws sabers. The trumpeters take post on the flank toward which the escort is to march in returning.

The senior lieutenant, the standard bearers, and a sergeant designated by the captain dismount in front of the colonel's quarters, their horses being held by a trumpeter.

The standard bearers, preceded by the lieutenant and followed by the sergeant, then enter the building to receive the standards.

The standard bearers reappear, followed by the lieutenant and sergeant. They mount and form facing the center of the escort, the lieutenant on the right, the sergeant on the left, the trumpeter returning to his place with the assembled trumpeters.

The captain then commands: 1. **Present**, 2. **SABER**. The trumpeters sound to the standard, the guidon saluting.

Sabers are brought to the carry, the lieutenant and sergeant return to their posts; the squadron forms column, the standard bearers placing themselves in the center, and marches at a walk to trumpet music back to the regiment. As the escort approaches, the regiment is brought to attention and sabers are drawn. The

escort approaches the regiment so as to pass along the front at 100 yards.

When the standards arrive opposite the colonel the standard bearers turn out of column and, advancing toward the colonel, halt at 12 yards in front of him.

The trumpeters cease playing, take up the trot, and move quickly to their post on the right; the escort trots to its place in the regiment.

When the escort and trumpeters have reached their places the colonel faces the regiment and commands: 1. **Present**, 2. **SABER**. The guidons salute. The colonel faces the standards and salutes, the trumpeters sounding **To the Standard**. The national and regimental standards salute.

The colonel then faces about and commands: 1. **Carry**, 2. **SABER**. He may address the regiment in remarks appropriate to the occasion. The standards then take their places in the regiment with the guard of the standard.

The regiment is then marched to trumpet music toward the colonel's quarters as far as it can conveniently go, when the colonel halts it and commands: **Dismiss your Squadrons**. The standards are escorted by the guard of the standard to the colonel's quarters, and the squadrons are marched off and dismissed.

GUARD MOUNTING, MOUNTED.

857. The organization designated for guard is paraded and inspected by its commander on its own parade ground. It marches with sabers drawn to the post of the guard to the music of its trumpeters or of the assembled trumpeters of the regiment.

As the new guard approaches the post of the guard the old guard is formed in line, sabers at the carry, its trumpeters 2 yards to its right. The new guard is marched so as to pass in front of the old from left to right. As it approaches the left of the old guard the latter presents sabers and returns to the carry when it has passed.

The new guard marches, at the walk, past the old guard, commanders of both guards saluting, and forms line on the right of the old guard.

The commander of each guard then commands: 1. **Present**, 2. **SABER**; salutes the commander of the other guard and then commands: 1. **Carry**, 2. **SABER**.

When the commander of the organization is not the officer of the day, the guard is brought to attention upon the approach of the latter, the officer of the guard commanding: 1. **Present**, 2. **SABER**, and saluting. The officer of the day returns the salute; the officer of the guard then commands: 1. **Carry**, 2. **SABER**; 1. **Return**, 2. **SABER**.

The details of relieving guard are found in the Manual of Guard Duty.

While the sentinels and detachments of the old guard are being relieved, both guards stand *at ease*; or if the delay is considerable, they are dismounted and rested. If the trumpeters of the regiment are assembled they play from time to time while the guard is being relieved.

The detachments and sentinels of the old guard as they are relieved and come in form on its left. Both guards then come to attention and draw sabers. The old guard is marched off past the front of the new guard, which presents sabers, the commanders of both guards saluting.

If the trumpeters of the regiment are present they take their place ahead of the old guard as it passes the new guard. The trumpeters sound a march as soon as the new guard has presented sabers.

The old guard marches with trumpet music to its own parade ground where it is dismissed.

Guard mounting, dismounted, is conducted on the same principles. The post band replaces the trumpeters for marching and plays concert music while the guard is being relieved.

HONORS AND SALUTES.

858. The President and the Vice President will be received with regimental standards dropping, officers and troops saluting, and the bands playing "The Star Spangled Banner," or trumpeters sounding "To the Standard." Officers of the following grades of rank will be received with regimental standards dropping, officers and troops saluting, and the bands or trumpeters playing, as follows: The general, the General's March; the lieutenant general, trumpets sounding 3 flourishes; a major general, 2 flourishes; a brigadier general, 1 flourish.

To the members of the Cabinet, the Chief Justice, the President *pro tempore* of the Senate, the Speaker of the House of Representatives, American or foreign ambassadors, and governors within

their respective States and Territories the same honors are paid as to the general, except that a foreign ambassador will be received with the national air of his country, and that the number of guns fired as personal salute will be as prescribed in the Army Regulations; to the Assistant Secretary of War and to American or foreign envoys or ministers the same honors as to the lieutenant general; to officers of the Navy the honors due to their relative rank; to officers of marines and volunteers, and militia when in the service of the United States, the honors due to like grades in the Regular service; to officers of a foreign service the honors due to their rank.

859. The national or regimental standard, uncased, passing a guard or other armed body will be saluted, the field music sounding "To the Standard." Officers or enlisted men passing the uncased standard will render the prescribed salute; with no arms in hand, the salute will be the hand salute, the headdress not to be removed.

860. When the "Star Spangled Banner" is played at retreat at a military post or at "Colors" on a transport, officers and men stand at attention, facing the music, retaining that position until the last note of the air, and then salute.

On other occasions when the "Star Spangled Banner" is played where persons belonging to the military service are present in their official capacity, or present unofficially but in uniform, officers and men will stand at attention, facing toward the music and salute, retaining the position of salute until the last note of the air.

861. Abroad, or when representatives of foreign services are present, care will be taken to conform to generally accepted military customs and courtesies.

862. No honors are paid by troops when on the march, in trenches, or on outpost, except that they may be called to attention; no salute is rendered when marching in double time.

In approaching or passing each other within saluting distance individuals or bodies of troops exchange salutes when at a distance of about 6 paces. If they do not approach each other that closely the salute is exchanged at the point of nearest approach.

Arms are not presented by troops except in the ceremonies and in saluting the color.

The commander of a body of troops salutes all general officers and the commander of his post, regiment, or squadron, by bringing his

command to attention and saluting in person. The troops are brought to attention in time to permit the salute to be rendered at the prescribed distance; they are held at attention until after the salute has been acknowledged.

When an officer entitled to the salute passes in rear of a body of troops, it is brought to attention while he is opposite the post of the commander.

The commander of a body of troops salutes in person all officers senior to him in grade, other than those above specified, without bringing the troops to attention. A noncommissioned officer commanding a detachment will bring it to attention before saluting an officer.

The commander of a body of troops exchanges salutes with the commanders of other bodies of troops; the troops are brought to attention during the exchange.

An officer commanding a body of troops is saluted by all officers junior to him in grade, and by men out of ranks. He does not acknowledge these salutes.

Salutes are not exchanged while engaged in drill or exercises.

863. When making or receiving official reports all officers will salute, if covered; if uncovered, they stand at attention. When under arms, the salute is made with the saber, if drawn, otherwise with the hand. On meeting, all officers salute when covered; when uncovered, they exchange the courtesies observed between gentlemen. In the observance of this rule officers should set a high standard as an example to their men. Military courtesy requires the junior to salute first, but when the salute is introductory to a report made at a military ceremony or formation to the representative of a common superior—as, for example, to the adjutant, officer of the day, etc.—the officer making the report, whatever his rank, will salute first; the officer to whom the report is made will acknowledge, by saluting, if covered, or verbally, if uncovered, that he has received and understood the report.

Uncovering is not a form of the prescribed salute, and the hand salute is executed only when covered.

864. Saluting distance is that within which recognition is easy. In general it does not exceed 30 paces. Officers are saluted whether in uniform or not.

On all occasions outdoors, and also in public places, such as stores, theaters, railway and steamboat stations, and the like, the salute to any person whatever by officers and enlisted men in uniform, with no arms in hand, whether on or off duty, shall be the hand salute, the headdress not to be removed.

Indoors, except as provided in the preceding paragraph, an unarmed enlisted man uncovers and stands at attention upon the approach of an officer. If armed with the rifle, he makes the rifle salute.

An enlisted man, armed with the saber and out of ranks, salutes all officers with the saber, if drawn; otherwise he salutes with the hand. If on foot and armed with a rifle, he makes the rifle salute.

Men out of doors and armed with the rifle, salute with the rifle on either shoulder; if indoors the rifle salute is rendered at the order or trail.

An enlisted man, if seated, rises on the approach of an officer, faces toward him, and, if covered, salutes; if uncovered, he stands at attention. Standing, he faces an officer for the same purpose. If the parties remain in the same place or on the same ground, such compliments need not be repeated. Soldiers actually at work do not cease work to salute an officer unless addressed by him.

When an officer enters a room where there are soldiers, the word "Attention" is given by some one who perceives him, when all rise and remain standing in the position of a soldier until the officer leaves the room. Soldiers at meals do not rise.

Before addressing an officer, an enlisted man makes the prescribed salute. He again salutes after receiving a reply. If uncovered, he stands at attention without saluting.

Soldiers at all times and in all situations pay the same compliments to officers of the Army, Navy, Marine Corps, and Volunteers, and to officers of the Organized Militia, or of foreign services, in uniform, as to officers of their own regiment, corps, or arm of service.

Officers will acknowledge the courtesies of enlisted men by returning their salutes smartly and promptly. When several officers in company are saluted, all return it.

TRUMPET CALLS.

SERVICE CALLS.

865. *First call, full dress, overcoats, drill, stable, water, and boots and saddles* precede the *assembly* by such interval as may be prescribed by the commanding officer.

In camp, where the men are near their horses and known to be present, the *assembly* may be sounded immediately after *boots and saddles*, in which case the men immediately proceed to the horses and saddle.

Mess, church, and fatigue may also be used as warning calls.

First call is a call for formation on foot only; it does not precede and is not used in connection with other warning calls, except *full dress* and *overcoats*.

Boots and saddles is the call for mounted formations; for mounted drills it immediately follows the *drill call*.

When full dress or overcoats are to be worn the *full dress* or *overcoats* call immediately follows first call or *boots and saddles*.

Call to quarters; the call for the men to go to their quarters.

Assembly; the call for the platoons or details to fall in. The platoons are assembled in the squadron as soon as practicable without further signal.

Regimental assembly; the call for squadrons to form regiment; it consists of *the regiment*, followed by *assembly*; it follows the *assembly* at such interval as may be prescribed by the commanding officer.

To the standard is sounded when the standard salutes.

The general is the signal for striking tents and loading wagons preparatory to marching.

Reveille is the call sounded at the beginning of the day; *retreat* is the call sounded at the close of the day or at sunset; *tattoo* is a call sounded in the evening between *retreat* and *call to quarters*. When roll calls are held on these occasions *reveille* and *tattoo* precede the *assembly* at such intervals as may be prescribed by the commanding officer; the *retreat* follows the *assembly*, the interval being only that required for formation and roll call.

Taps is the signal for extinguishing lights; it is usually preceded by *call to quarters* at such interval as the commanding officer may direct.

Assembly, reveille, retreat, to the standard, the flourishes, and the marches are sounded by all the trumpeters united; the other calls, as a rule, are sounded by the trumpeter of the guard or orderly trumpeter; he may also sound the *assembly* when the trumpeters are not united.

The morning gun is fired at the first note of *reveille*; or, if marches are played before *reveille*, it is fired at the commencement of the first march.

The evening gun is fired at the last note of *retreat*.

Fire call; the call for the men to fall in without arms to extinguish fire.

To arms; the call for the men to fall in under arms, dismounted, on their squadron parade grounds as quickly as possible.

To horse; the call for the men to go under arms to their horses, saddle, mount, and assemble at a designated place as quickly as possible.

DRILL CALLS.

It will be observed that *captains* (or *squadron commanders*) is the first two bars of *officers* with the *attention* added.

In sounding the calls for simultaneous movements, the call *platoons, squadrons, or regiments* precedes the preliminary call for the movement.

The calls are sounded in the same order as the commands are prescribed in the text.

Gangway is sounded to clear the way or to warn other troops that a passage is desired.

List of trumpet calls.

SERVICE CALLS.

- | | | |
|-------------------|-----------------------|----------------------|
| 1. First call. | 12. Tattoo. | 23. Captains (or |
| 2. Trumpeters. | 13. Call to quarters. | squadron com- |
| 3. Full dress. | 14. Taps. | manders). |
| 4. Overcoats. | 15. Mess. | 24. First sergeants. |
| 5. Drill. | 16. Sick. | 25. To the standard. |
| 6. Stable. | 17. Church. | 26. The General's |
| 7. Water. | 18. Issue. | March. |
| 8. Boots and sad- | 19. Fatigue. | 27. The flourish. |
| dles. | | 28. The general. |
| 9. Assembly. | 20. School. | 29. Fire. |
| 10. Reveille. | 21. Recall. | 30. To arms. |
| 11. Retreat. | 22. Officers. | 31. To horse. |

FIELD CALLS.

- | | | |
|--------------------------|----------------------------|-----------------------|
| 32. March, or execution. | 41. Charge. | 50. As foragers. |
| 33. Attention. | 42. Right. | 51. Rally. |
| 34. Prepare to mount. | 43. Left. | 52. To fight on foot. |
| 35. Prepare to dismount. | 44. To the rear. | 53. As skirmishers. |
| 36. Forward. | 45. Column. | 54. Commence firing. |
| 37. Halt. | 46. Line. | 55. Cease firing. |
| 38. Walk. | 47. Platoons. | 56. Route order. |
| 39. Trot. | 48. Squadron or squadrons. | 57. Gangway. |
| 40. Gallop. | 49. Regiment or regiments. | |

SQUADRON CALLS.

First	} To be preceded by "Squadron."
Second	
Third	
Fourth	
Fifth	
Sixth	

REGIMENTAL CALLS.

A short distinctive regimental call for each regiment.

THE GUIDON.

866. The squadron guidon appears at ceremonies, where it is carried by a noncommissioned officer riding one yard to the left of the leader of the directing platoon and one yard less advanced. In campaign it is carried at the head of the squadron and indicates the position of the squadron on the march and in camp. It is not carried into action nor in the presence of the enemy.

POSITION OF CARRY GUIDON (DISMOUNTED).

867. The lance of the guidon is held vertically in the right hand, thumb in front of the lance, forefinger along the side, ferrule about 6 inches from the ground. In marching at attention it is thus carried.

POSITION OF ORDER GUIDON.

868. The ferrule of the lance rests on the ground on a line and touching the toe of the right shoe; the right hand grasps the lance in the same manner as when at a carry.

Parade rest is executed as with the rifle, except that the forearms are nearly horizontal.

At the command *attention*, resume the order.

The order and parade rest are executed with the squadron; the carry at the command *right shoulder arms*.

At *stand to horse*, the ferrule of the lance rests on the ground on a line with and touching the toe of the left shoe, lance vertical, left hand, grasping the lance, at the height of the neck, elbow and forearm closed against the lance.

At the command *prepare to mount*, raise the lance from the ground while stepping back; upon halting place the ferrule on the ground about one foot in front of the horse's left foot.

869. After mounting, grasp the lance with the right hand under the left, which lets go of it without quitting the reins; raise the lance over the horse's neck under the reins, lower and place the ferrule in the stirrup socket; the right hand then grasps the lance, forearm nearly horizontal, the arm through the sling, lance vertical. *This is the position of carry guidon, mounted.*

The guidon executes the *salute* in the manner prescribed for the standard.

THE STANDARD.

1870. The word "standard" implies the national standard; it includes the regimental standard.

The silken national and regimental standards are carried in battle, campaign, and on occasions of ceremony at regimental headquarters in which two or more squadrons of the regiment participate.

In ceremonies the standards with their guards are 3 yards to the left of the front rank of the right center squadron in line, in line of columns, in mass, and in double column; in column they follow the center squadron at 6 yards, the distance of the following subdivision being increased accordingly. In action the position and rôle of the standards will be indicated by the colonel, who may, through their display, inspire enthusiasm and maintain the morale; he may, however, hold them back when they might indicate to the enemy the direction of the main attack, betray the position of the main body, or tend to commit the regiment to defensive action. In the presence of the enemy and during the "approach" the standards are carried cased, ready to be instantly broken out when their inspiration is required.

In garrison the standards, when not in use, are kept in the office or quarters of the colonel, and are escorted thereto and therefrom by the guard of the standard; in camp they are in front of the colonel's tent. From reveille to retreat, when the weather permits, they are displayed uncased; from retreat to reveille and during inclement weather they are cased.

Standards are said to be cased when furled and protected by the oilcloth covering.

The regimental standard salutes only in the ceremony of presentation to the standard and when saluting an officer entitled to the honor.

The national standard renders no salute except in the ceremony of presentation to the standard.

The manual of the standard is as prescribed for the guidon, except that at carry standard, dismounted, the ferrule of the lance is supported at the right hip.

871. *Standard salute, mounted:* Lower the standard to the front until the lance (under the right arm) is horizontal.

Dismounted: Slip the right hand up the lance as high as the eye, then lower the lance to the front by straightening the right arm to its full extent.

If marching, the salute is executed when at 12 yards from the officer entitled to the salute; the carry is resumed immediately after passing him.

At the halt, the salute is executed at the command: 1. **Present**, 2. **SABER** (or 2. **ARMS**); the carry is resumed at the command, 1. **Carry**, 2. **SABER** (or **Order Arms**).

872. *The guard of the standard* consists of two color sergeants, who are the standard bearers, and two experienced privates selected by the colonel. The senior color sergeant carries the national standard; the junior color sergeant carries the regimental standard. The regimental standard is always on the left of the national standard.

The guard of the standard is formed and marched in one rank, the standard bearers in the center. It salutes when the standard salutes. It *presents saber* at command of the standard bearer in receiving and parting with the standards; in the latter case the guard returns to the carry at the command of its senior member.

APPENDIX A.
TRUMPET MUSIC.
SERVICE CALLS.

To economize space, the music is written an octave higher than the trumpet scale, and is adjusted to the scale of the bugle.

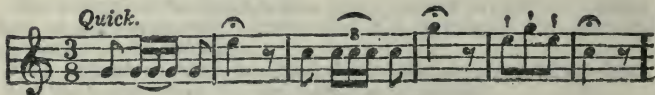
1. FIRST MUSIC.



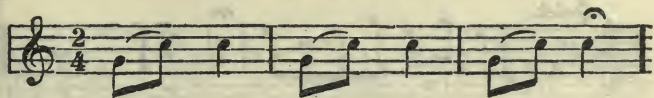
2. TRUMPETERS.



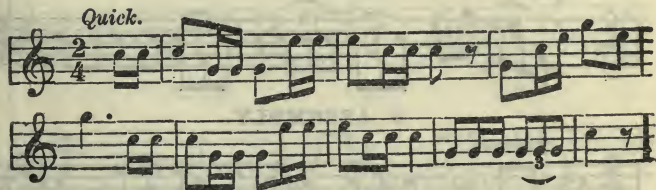
3. FULL DRESS.



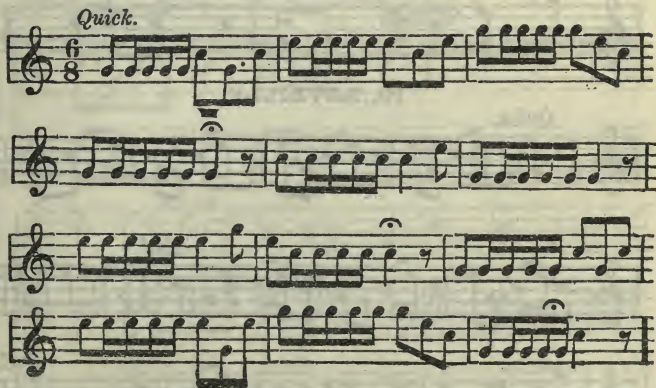
4. OVERCOATS.



5. DRILL.



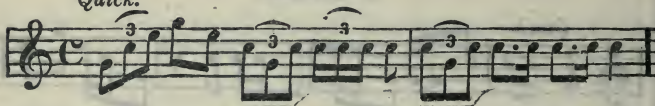
6. STABLE.



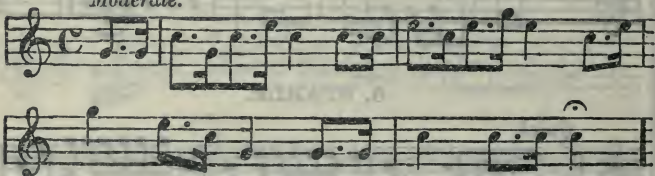
7. WATER.

Quick.

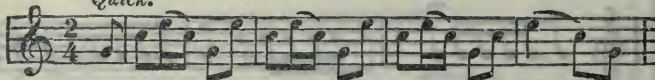
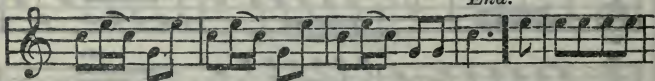
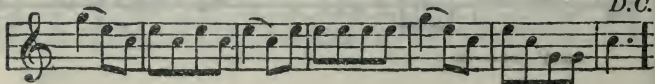
8. BOOTS AND SADDLES.

Quick.

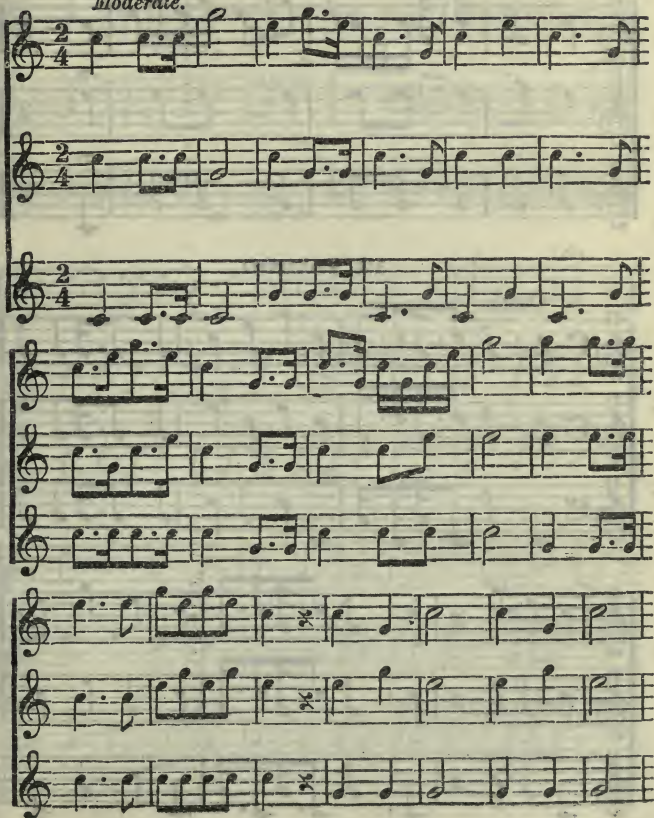
9. ASSEMBLY.

Moderate.

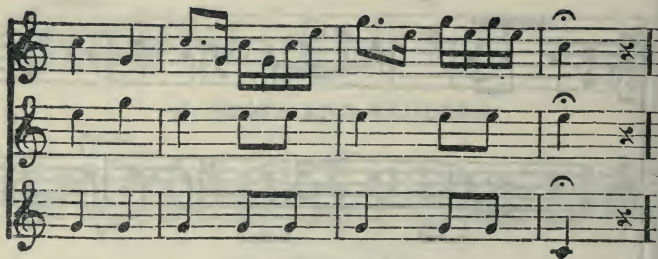
10. REVEILLE.

Quick.*End.**D.C.*

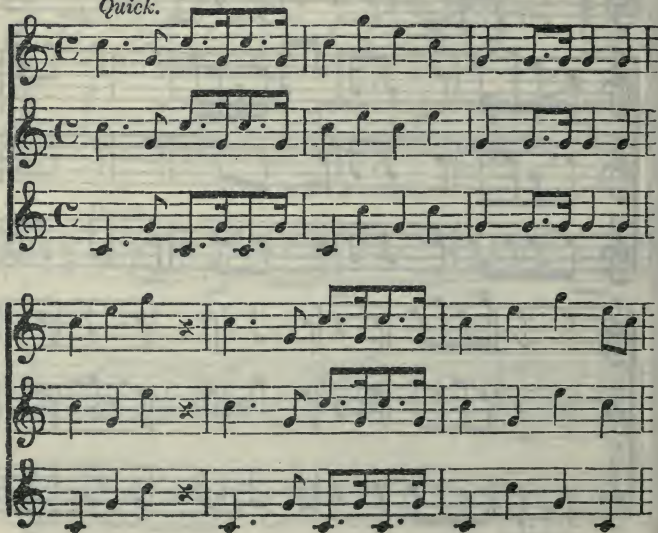
11. RETREAT.

Moderate.

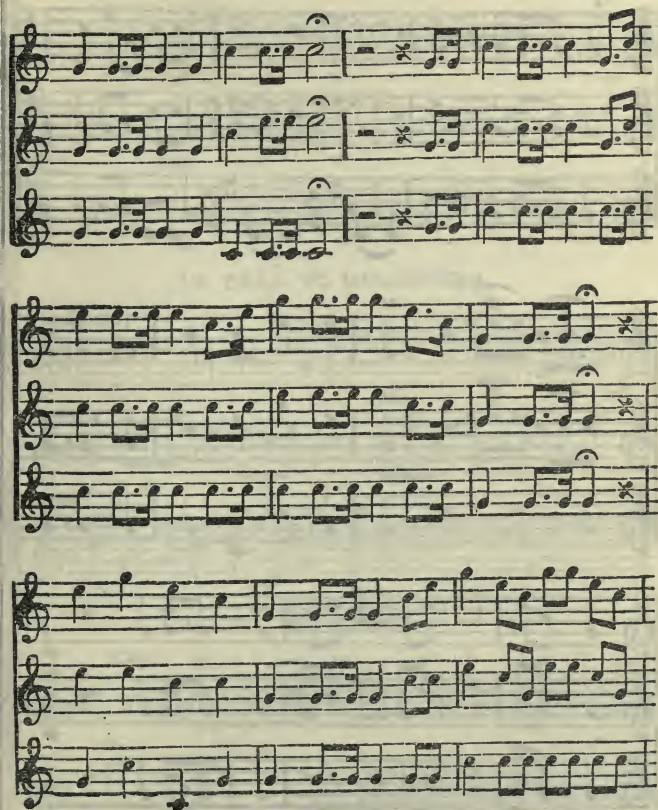
RETREAT—Continued.



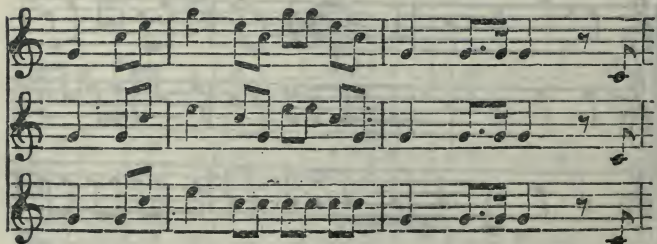
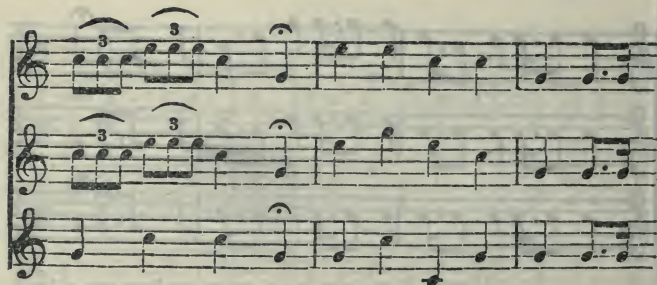
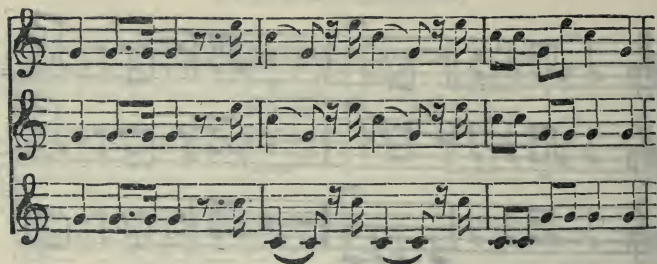
12. TATTOO.

Quick.

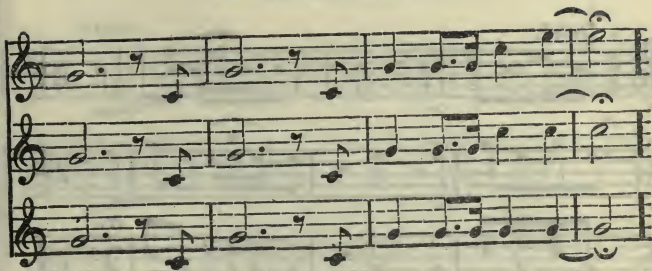
TATTOO—Continued.



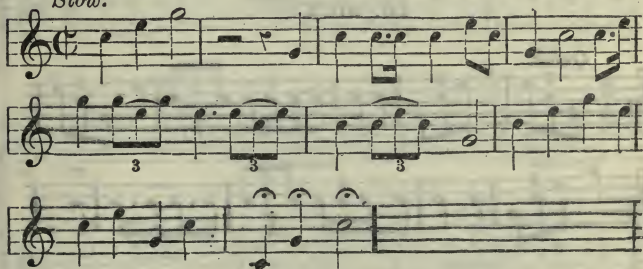
TATTOO—Continued.



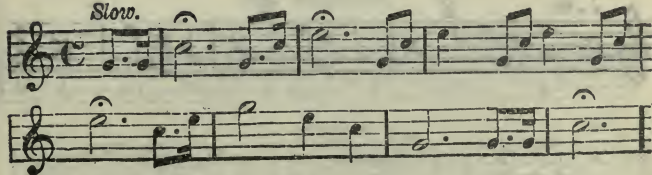
TATTOO—Continued.



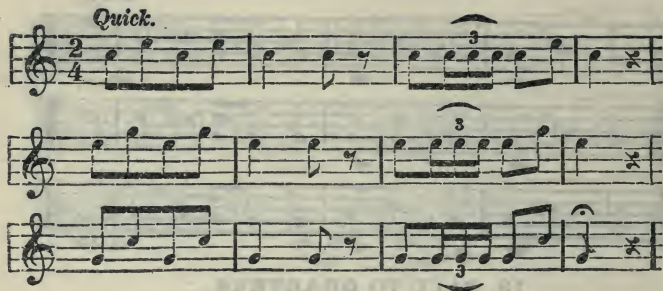
13. CALL TO QUARTERS.

Slow.

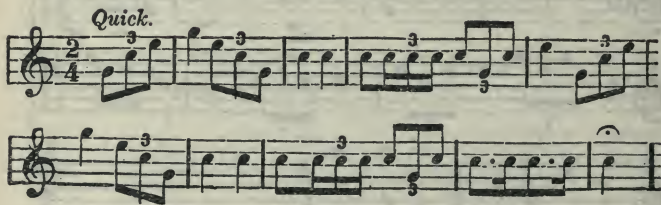
14. TAPS.

Slow.

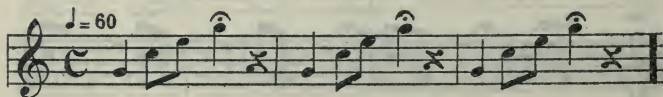
15. MESS.



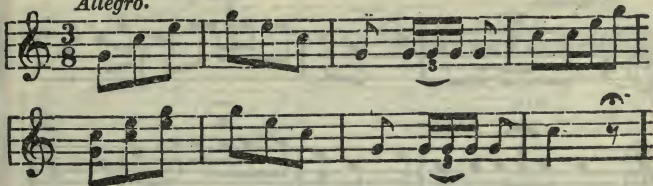
16. SICK.



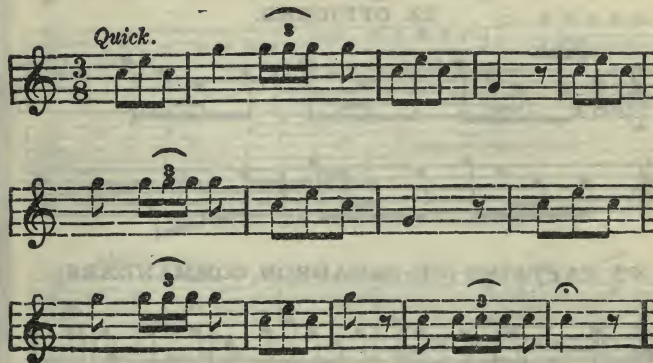
17. CHURCH.



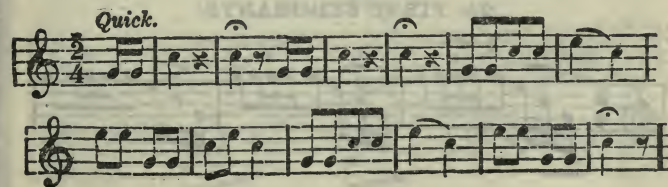
18. ISSUE.

Allegro.

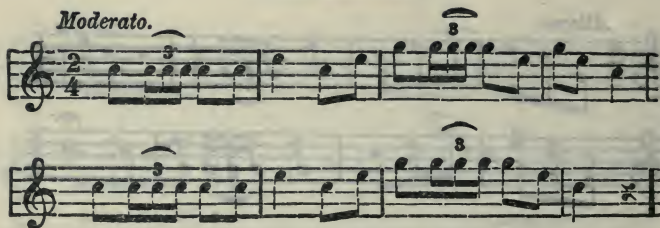
19. FATIGUE.

Quick.

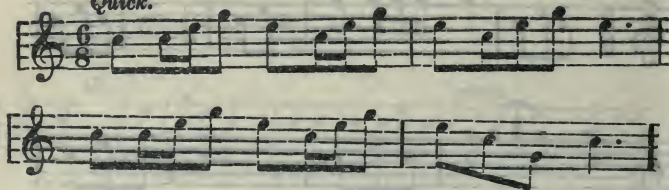
20. SCHOOL.

Quick.

21. RECALL.

Moderato.

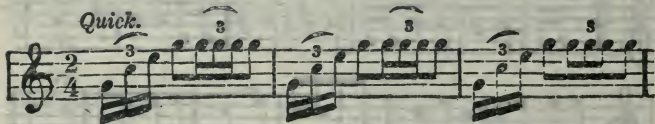
22. OFFICERS.

Quick.

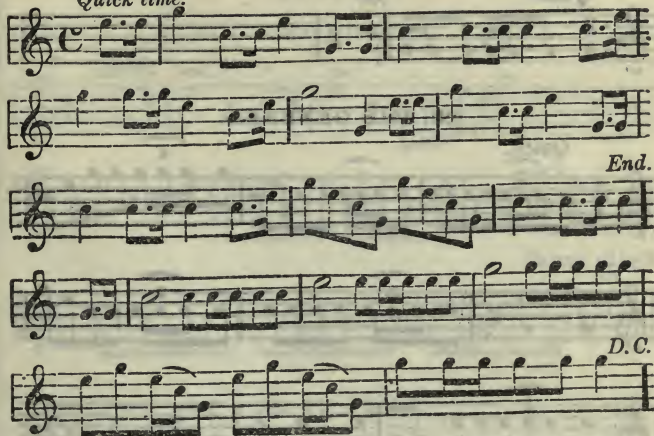
23. CAPTAINS (OR SQUADRON COMMANDERS).



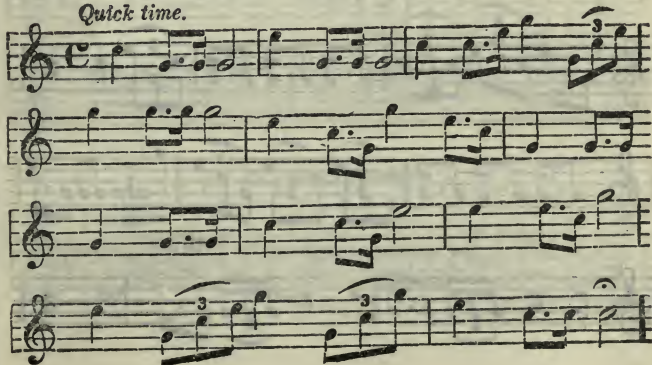
24. FIRST SERGEANTS.

Quick.

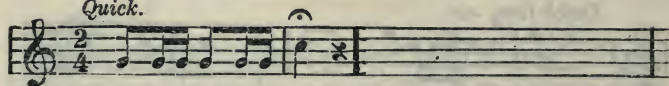
25. TO THE STANDARD.

Quick time.

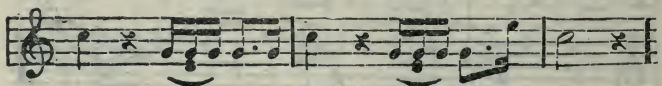
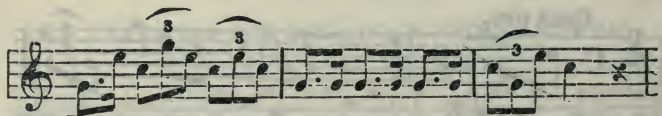
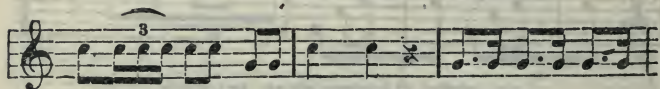
26. THE GENERAL'S MARCH.

Quick time.

27. THE FLOURISH.

Quick.

28. THE GENERAL.

Quick.

ALARMS.

29. FIRE.

Quick.

Repeat at will.

This musical piece is for '29. FIRE.' It is written in C major, common time (C), and marked 'Quick.' It consists of two staves. The first staff begins with a treble clef and a common time signature. The melody starts with a half note G4, followed by a quarter note A4, a quarter note B4, and a half note C5. The second staff continues the melody with a half note D5, a quarter note E5, a quarter note F5, and a half note G5. The piece concludes with a repeat sign and the instruction 'Repeat at will.'

30. TO ARMS.

Quick.

Repeat at will.

This musical piece is for '30. TO ARMS.' It is written in C major, common time (C), and marked 'Quick.' It consists of two staves. The first staff begins with a treble clef and a common time signature. The melody starts with a half note G4, followed by a quarter note A4, a quarter note B4, and a half note C5. The second staff continues the melody with a half note D5, a quarter note E5, a quarter note F5, and a half note G5. The piece concludes with a repeat sign and the instruction 'Repeat at will.'

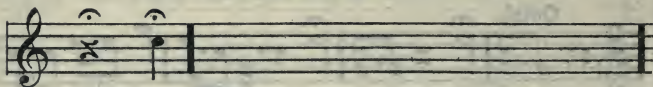
31. TO HORSE.

Presto.

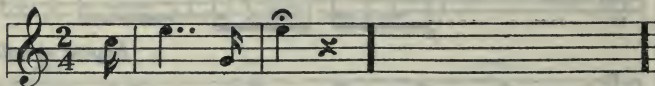
This musical piece is for '31. TO HORSE.' It is written in C major, common time (C), and marked 'Presto.' It consists of two staves. The first staff begins with a treble clef and a common time signature. The melody starts with a half note G4, followed by a quarter note A4, a quarter note B4, and a half note C5. The second staff continues the melody with a half note D5, a quarter note E5, a quarter note F5, and a half note G5. The piece concludes with a repeat sign and the instruction 'Repeat at will.'

FIELD CALLS.

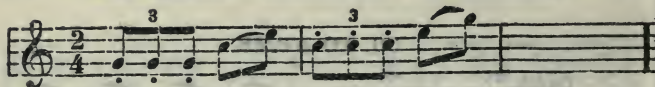
32. MARCH OR EXECUTION.



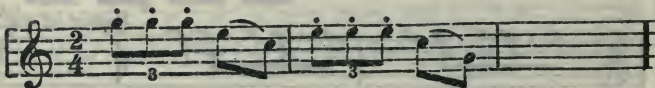
33. ATTENTION.



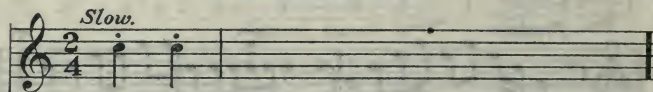
34. PREPARE TO MOUNT.



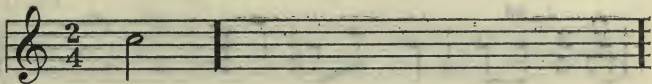
35. PREPARE TO DISMOUNT.



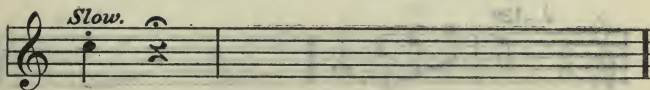
36. FORWARD.



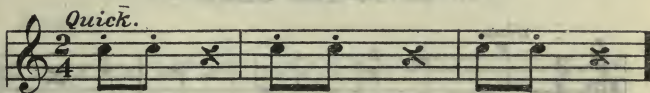
37. HALT.



38. WALK.



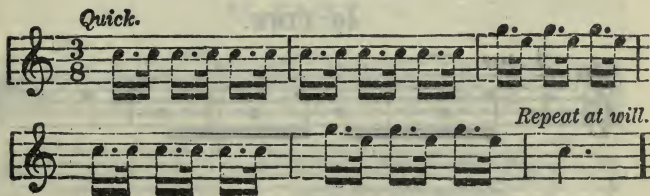
39. TROT.



40. GALLOP.



41. CHARGE.



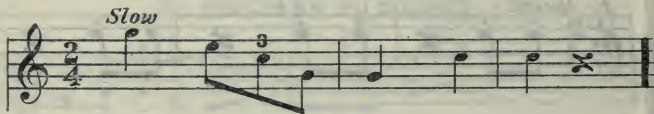
42. RIGHT.



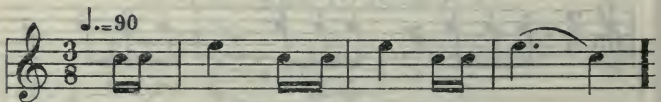
43. LEFT.



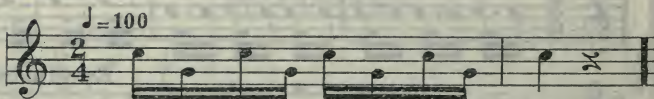
44. TO THE REAR.



45. COLUMN.



46. LINE.



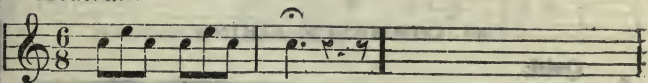
47. PLATOONS.

Quick.

48. SQUADRON OR SQUADRONS.

Quick.

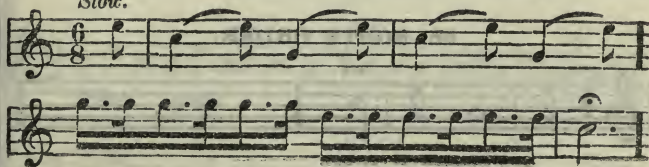
49. REGIMENT OR REGIMENTS.

Moderate.

50. AS FORAGERS.

Slow.

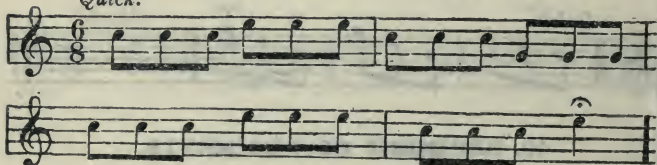
51. RALLY.

Slow.

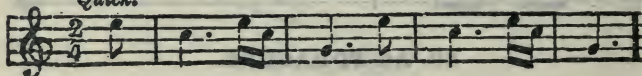
52. TO FIGHT ON FOOT.



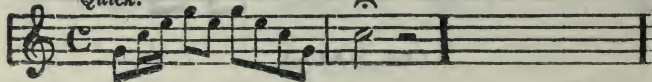
53. AS SKIRMISHERS.

Quick.

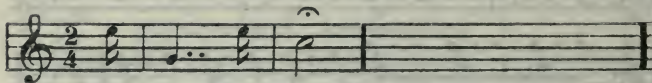
54. COMMENCE FIRING.

Quick.

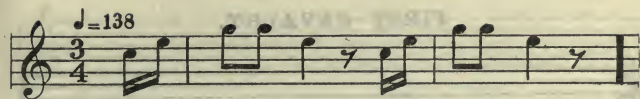
55. CEASE FIRING.

Quick.

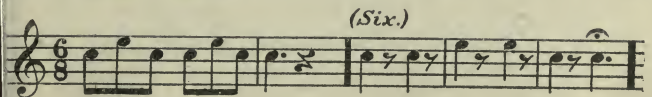
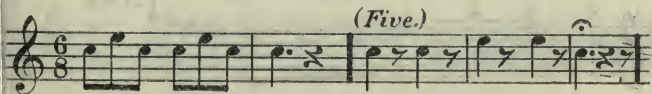
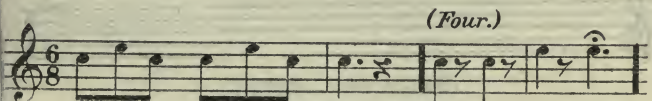
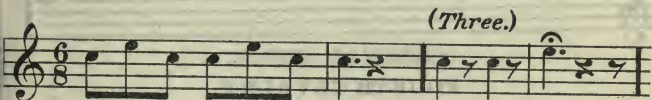
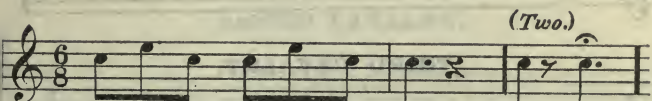
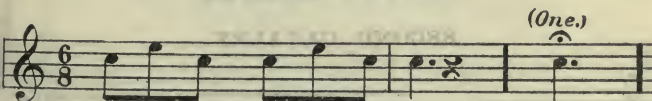
56. ROUTE ORDER.



57. GANGWAY.

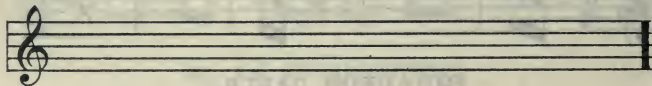


SQUADRON CALLS.

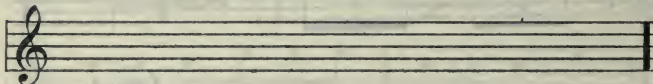


REGIMENTAL CALLS.

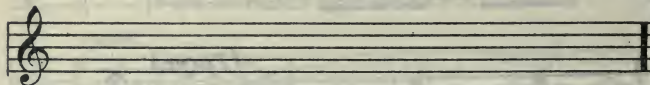
FIRST CAVALRY.



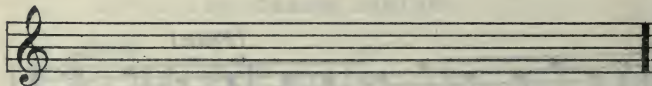
SECOND CAVALRY.



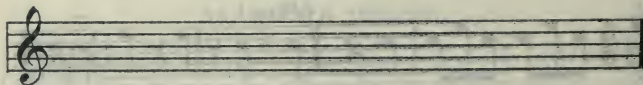
THIRD CAVALRY.



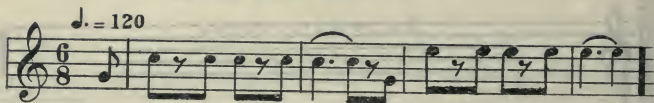
FOURTH CAVALRY.



FIFTH CAVALRY.



ELEVENTH CAVALRY.



TWELFTH CAVALRY.



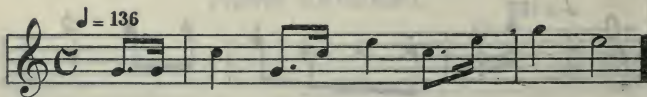
THIRTEENTH CAVALRY.



FOURTEENTH CAVALRY.



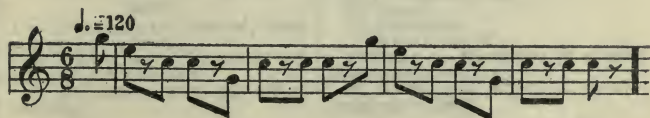
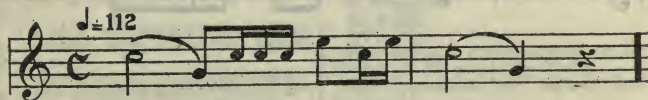
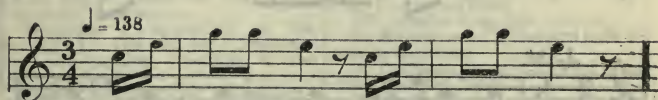
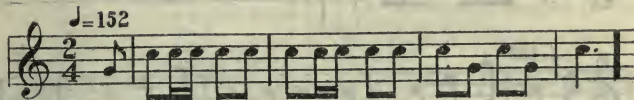
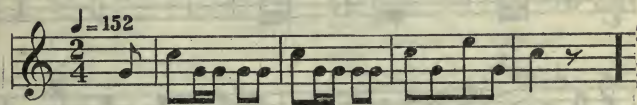
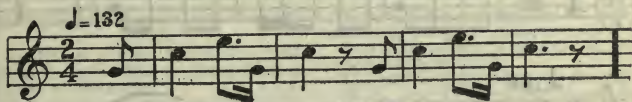
FIFTEENTH CAVALRY.



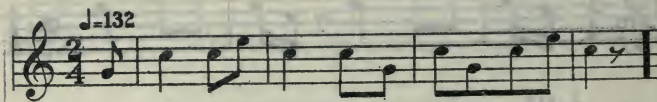
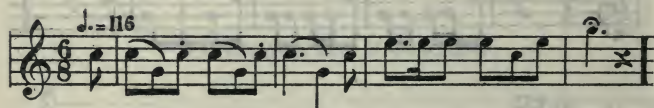
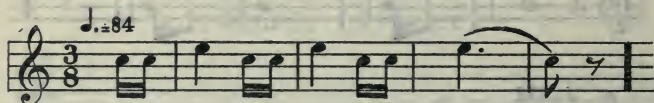
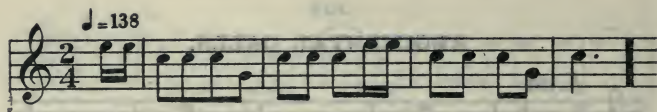
SUGGESTIONS OR MODELS

FOR

REGIMENTAL CALLS.



REGIMENTAL CALLS—Continued.



APPENDIX B.

SEMAPHORE CODE FOR CAVALRY.

CONVENTIONAL SIGNALS AND INSTRUCTIONS.

To call or answer: "Attention," followed by call letter of station called. Repeat as necessary.

Both stations then make "Interval."
 last word: R, 1 "Interval;" or Q.
 last sentence: R, 2 "Intervals."
 Repeat last message: R, 3 "Intervals."
 after (word): R, "Interval" (word).
 word: 1 "Interval."
 End of sentence: 2 "Intervals."
 message: 3 "Intervals."

Error: "Attention-Interval," then repeat word.

To break in: "Attention."
 Wait a moment: "Attention" followed by two or more "Intervals."

Acknowledgment or understood: U.
 "Numerals" precedes every number sent and indicates numerals until "Interval" is made, after which letters recur without further indication. When numerals follow letters no intervening "Interval" is necessary.

"Negative," "Affirmative," or "Interrogatory" followed by "Interval" give corresponding meanings to the following signal.

Receiver acknowledges "Attention" whenever made, also "Repeat," etc., and end of message, *when latter is understood.*

If a letter or a numeral occurs twice in succession swing one or both flags to the front.

While waiting for "Acknowledgment" or in case of delay remain at "Interval."

Words not in code are spelled out.

HINTS.

A to D: Left arm at "Interval," right arm progresses upward.

E to G: Right arm at "Interval," left arm progresses downward.

A to G: Complete series one arm at "Interval."

K to N: Right arm inclined 45° downward, left arm progresses downward.

P to S: Right arm horizontal, left arm progresses downward.

H, I, and O: Left arm crosses the body.

W, X, and Z: Right arm crosses the body.

Opposite letters: A&G, B&F, C&E, H&Z, I&X, J&P, K&V, O&W, M&S, and Q&Y.

The numerals are the first 10 letters in order.

The special meanings are generally represented by their initials, e. g., "Negative"—N.

AAA: Ammunition going forward (if signaled from the rear to the front).

AAA: Ammunition required (if signaled from the front).

CCC: Charge (if signaled from the rear to the front).

CCC: About to charge if no instructions to contrary (if signaled from the front).

CF: Cease firing.

F: Commence firing.

DT: Double time, rush, or hurry.

O: Move forward (if signaled from the rear to the front).

O: Preparing to move forward (if signaled from the front).

HHH: Halt.

L: Left.

N: Negative.

R: Range.

RT: Right.

SSS: Support going forward (if signaled from the rear to the front).

SSS: Support needed (if signaled from the front).

SUF: Suspend firing.

T: Target.











































Y: Affirmative.

Q: What is the (R).

M: Bring up the horses (if signaled from front to rear).

M: Horses going forward (if signaled from rear to front).

TWO ARM SEMAPHORE CODE.

 A	 I	 G	 7	Affirmative  M	 S	 Y
 B	 2	 H	 8	Negative  N	 T	 Z
 C	 3	 I	 9	Acknowledgment or Understood  O	 U	 Attention or Error
 D	 4	 J	 0	Interval  P	 V	 Interval
 E	 5	 K	 Interrogatory	Numerals  Q	 W	 Numerals
 F	 6	 L	 Repeat	 R	 X	 X

APPENDIX C.

LIST OF MANUALS FOR REFERENCE.

U. S. Army Regulations.	Manual of Interior Guard Duty.
Field Service Regulations	Outline of First Aid for the Hos-
Small-Arms Firing Manual.	pital Corps.
Saber Exercise.	Signal Book, U. S. Army.
Directions for the Use of Equip-	Engineer Field Manual.
ment.	Cavalry Machine Gun Regula-
The Manuals of Equitation of the	tions.
Mounted Service School.	Pack Transportation, Quarter-
The Army Horse in Accident	master's Department.
and Disease.	Regulations U. S. Army Trans-
The Army Horse Shoer.	port Service.
Physical Training for the U. S.	Manual for Army Cooks.
Army.	Trumpet Music.





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